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ABSTRACT

Teaching and learning in the high-technology workplace were examined through case studies of four individuals who were selected for study because they represented a broad spectrum of personal agendas, learning styles, and backgrounds. The employees' one-on-one meetings with their managers were analyzed to identify the kinds of lessons each employee received and how each responded. The following were among the key findings: (1) the bottom line-oriented, fast-paced, productivity-based culture of the corporation create a rather rigid framework for determining how learning takes place and for defining successful performance; (2) individuals whose learning styles, values, and behavior meshed with the corporate agenda were more likely to be successful, whereas those with divergent learning styles, values, and behaviors were likely to have much more difficulty learning what they needed to know; (3) because a concept of team membership is a powerful motivator to achieve, models for learning at work and in school should be based on a sense of team, shared purpose, and shared responsibility for each team member's success; and (4) educators should provide a safe learning environment where learners can avoid having their learning constrained by the fear of seeming stupid. (The bibliography lists 82 references. A field note index is appended.) (MN)

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LEARNING IN THE HIGH TECHNOLOGY WORKPLACE

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Susan Gail Richardson

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Learning in the High Technology Workplace

Susan Gail Richardson

Abstract

This study achieves insights about how teaching and learning take place in a high technology company by creating a broad ethnographic portrait of the workplace culture as well as by closely examining the way teaching and learning take place for four focal individuals. First, ethnographic methods are employed to examine the workplace culture and to illuminate the ways that cultural values affect learning. The study identifies and describes the workplace curriculum and the learning opportunities through which that curriculum can be mastered. It also discusses the motivations and rewards for learning as well as the alternatives to learning.

The second part of the study involves case studies of four individuals in the workplace. Through analysis of the focal individuals and their interactions, this portion of the study examines the ways that different individuals' value systems and learning styles affect how they define their jobs, derive satisfaction at work, and engage in teaching and learning. Close analysis of each employee's one-on-one (individual meeting) with his or her manager illuminates the kinds of lessons each employee receives and how each responds.

Previous educational research using ethnographic and case study methods has focussed primarily on the ways that teaching and learning occur in classrooms and on the ways that cultural values and practices affect educational outcomes for students in formal educational settings. The theoretical principles and methods which guide the study of teaching and learning have not focussed upon the workplace.

One of the key findings of the study is that the bottom-line oriented, fast-paced, productivity-based culture of the corporation creates a rather rigid framework for determining how learning takes place and for defining successful performance. Those whose learning styles, values, and behavior

mesh with this corporate agenda are likely to be successful. Those with divergent learning styles, values, and behaviors have much more difficulty learning what they need to know. In the final analysis, businesses must be profitable if they are to survive, and the corporation can only afford to develop and grow those individuals who bring a profitable return on investment in terms of their contribution to the company.

For my friends and colleagues at Just and for people everywhere
who work for their daily bread.

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This study would not have been possible without the support, encouragement, and advice of many wonderful people. I am deeply grateful to them all. Sarah W. Freedman, my teacher and advisor, has enabled me to grow from student to researcher. This is a difficult and sometimes painful process. Sarah has guided me through it with great intelligence, steadfastness, and strength. As anyone who knows Sarah will attest, she is uncompromising in her standards of excellence. Yet, in holding up those standards, she always communicated an unflagging belief in my ability to meet them. This combination of traits enabled me to bring to this study all that I had to give. I am proud and grateful to have studied under Sarah.

Anne Dyson opened up the doors of case study and qualitative research to me. Her vision of teaching and learning inspired me from the first day I was fortunate enough to be a student in her class. Throughout my graduate career as well as during the course of this study, she has provided key insights and recommended paths to explore. Her advice has always shown me a way through when I thought I was at a dead end. She has consistently shown caring and compassion for which I am deeply grateful.

John Ogbu expanded my horizons in many directions. His multi-cultural perspective, his appreciation for the power of culture, and the insights he has shared through his own work on oppositional culture enabled me to think about well-known scenes in entirely new ways. I have sought to apply that vision to this study and to all that I do. It is a powerful and important way of looking at the world. It questions ethnocentric perspectives and encourages understanding and appreciation for the rich assortment of values and life views in this world.

This study would never have been possible without the participation of the people in the Training Department at Just Computers. They allowed and encouraged me to observe, question, interview, and discuss findings throughout the course of this study. I could not have wished for a more open and cooperative group of people. I am particularly indebted to the focal individuals who allowed me into their personal worlds and enabled me to

share what those worlds revealed about learning in the workplace. I hope that the insights gained from that sharing will improve the work world for all of us who give so much of our time and energy to it.

I am deeply grateful to the two people who gave me my first experiences with teaching and learning—my parents, Lisa and Bernard Cappe. My mother, a holocaust survivor, ingrained in me the belief that my life must count for something that makes the world a better place. I strive for that daily. My father, a medical doctor who believed that his patients' lives depended upon his knowing all that he could and then pushing the boundaries of knowledge even further, provided for me a model of scholarship and instilled in me a love of learning.

Throughout the years of my graduate study, my family has stood solidly by my side, helping, supporting, encouraging, listening, and caring. My children Julie and Scott have encouraged me and shown understanding throughout, even when my studies took me away from them. My husband Steve has listened, offered insights, supported, encouraged, and listened some more, with incredible patience, understanding, humor and love. He always seems to know what I need and be able to supply it. Thank you is not enough.

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-CHAPTER 1-

RESEARCH PERSPECTIVES

But I really do think people learn differently here than in school. I mean I think it's amazing, and I never thought about that, that people NEVER QUESTION that you're gonna learn something. They NEVER question it. It's just -- you do it.
Lauren Taylor, Just employee

Well, you don't want to go to a manager and say, "I don't know how to do this," because he may feel, "hey, you can't do the job." So there is this thing to protect our own life and our own career. So we'll go to our peers which are non-threatening. Managers are threatening, I think.
Tom Winter, Just employee

I think if there were someone around who could be a mentor I might go to them, but actually it might be that I wouldn't go to them because I don't like to appear stupid. I have this thing about that.
Kathleen Donovan, Just employee

In its widest sense, education...[is] that part of the enculturative experience that, through the learning process, equips an individual to take his place as an adult member of his society. (Herskovitz, 1948).

After the director of the training department at Just Computers Company presented his goals and strategy for the department for the next year, Jean O'Donnell, one of the employees raised her hand and said, "It sounds great, but I think there's fear at the peon level about how to get there."

The workplace is about "how to get there." It is a cultural community with a goal, a destination, and a mission. It is a culture focussed on accomplishing this mission: bringing a product to market and thereby making money. If the workplace is one in which profit is not the goal, then its mission is satisfying the customer in ways that enable the business to continue effectively. Mastering the curriculum of the workplace thus consists of learning to determine the right products and learning to follow the right processes to achieve customer satisfaction and the success of the business enterprise. This

concept is captured in a slogan often heard at Just, "We've got to do the right things, and do things right." That slogan raises two key questions: How will we know what the right things are? How will we know how to do them right? To function effectively on the job, employees must learn the answers to these questions in their particular area of responsibility.

When I first began working at Just, it struck me that the workplace is the ultimate open classroom. I saw teaching and learning happening all around me, mostly in informal, unplanned and unexpected ways. It appeared clear to me from the beginning that some people were superstars, what Kanter (1977) has called "water walkers." They seemed to be on a path for the top. They seemed to know what to do and how to do it. What did they know and how did they learn it? Others seemed, clearly, to be hanging on by their fingernails. They seemed to be struggling to perform their jobs, to manage their workloads, to cope with the stress, and to present a facade that said, 'I'm OK.' How had they gotten there? Why had they failed to learn what the superstars had? A great many people, most people, fell in between these two extremes.

As an educator and educational researcher, I have always been intrigued with the questions surrounding why some people are successful and others are not and the corollary questions surrounding the ways that different people define success. These questions seemed particularly relevant at Just. It seemed that those who were highly successful were not necessarily any smarter, better educated, or more experienced than those who were much less successful. None of the easy correlations explained the differential patterns of behavior and achievement. So what did? These were the core questions that intrigued me when I began at Just and have continued to intrigue me throughout the four years that I have worked at Just.

Purpose of this Study

Few formal structures for learning exist in the workplace, yet individuals learn a great deal. The purpose of this study is to begin to uncover how individuals learn at work. It will examine the ways that employees acquire both cultural knowledge and task knowledge as they engage in activities at

work and interact with others in the workplace. While it may be argued that tasks cannot be considered independent of their cultural contexts, both cultural and task knowledge are embedded in the activities in which employees engage. Cultural knowledge is composed of knowledge of the values, attitudes, beliefs, and appropriate behaviors of a cultural group (Gearing, 1973; Spindler, 1982). Task knowledge is composed of the skills and information needed to perform an assignment successfully (Erickson, 1982). To study how these two types of learning occur and affect one another, and to understand how this process differs for different individuals, I will:

1. Document the learning environment and the cultural values and beliefs about learning in one workplace culture, the Training Department at Just Computers.
2. Document, from the points of view of individual employees:
 - a. what key task and cultural knowledge each employee needs to do his or her job successfully;
 - b. the key situations in which acquisition of cultural and task knowledge take place in this workplace;
 - c. the current state and the developmental history of individual employees' belief systems about success in this workplace.
3. Analyze, from the points of view of individual employees:
 - a. the processes through which these individuals develop their belief systems about success in this workplace;
 - b. the processes through which acquisition of both cultural and task knowledge take place and are affected by those belief systems;
 - c. the key ways that these employees enact what they have learned and how their actions reflect and affect the evolution of each individual's belief system about success.

In examining these facets of learning in the workplace, I hope to contribute to an understanding of how individuals acquire the cultural and task knowledge required to perform their jobs successfully and how that acquisition is guided by individuals' personal goals, values, and cognitive preferences--all of which contribute to their evolving belief systems about success at work.

Most individuals enter the workplace with a strong desire to succeed. Yet success is illusive, and the pursuits of some are more fruitful than others. Learning plays a key role in determining who succeeds and who does not. Both the individual and culture contribute to the teaching and learning that takes place. Individuals' personal belief systems motivate their desire and ability to marshal the resources necessary to learn. The culture provides a variety of learning opportunities.

But corporate cultures are not classrooms. The goal of school is learning. The goal of the corporation is to produce products and make a profit. Achievement in the workplace is measured by results. Individuals are assigned projects and, invariably, in order to successfully complete a project, the employee needs to learn to perform new tasks, acquire new skills, develop new problem-solving techniques, and/or solve new problems. What the individual employee will learn is determined both by the needs of the project and the needs of the individual. Furthermore, time that an employee spends learning is an investment that the corporation makes in that employee. The corporation expects a return on that investment in the form of employee performance which contributes to the success of the corporation. That return on investment is frequently measured on a short-term basis.

In the rapidly changing world of a high technology business, technological changes, changes in organizational processes, and changes in the business climate happen very quickly and frequently. All of these changes require problem-solving, learning, and adaptation. Learning quickly what one needs to know to perform one's job effectively presents a major ongoing challenge. And, since the workplace is not a classroom, such learning requires resourcefulness on the part of employees.

In doing this study, I hope to contribute in a practical sense to a better understanding of how individuals can learn what they need to know to be successful at work. I also hope to be able to contribute to a theoretical understanding of the connections between the socio-cultural contexts in which learning occurs and the individual social histories, value systems, and cognitive patterns which individuals bring to the scenes of learning.

Theoretical Background

Grappling with the Figure-Ground Dilemma: The Theoretical Challenge

Becoming human is becoming individual, and we become individual under the guidance of cultural patterns, historically created systems of meaning in terms of which we give form, order, point, and direction to our lives. (Geertz, 1973, p. 52)

In seeking to understand why and how people learn, the researcher confronts the classic dilemma that the photographer faces: the figure-ground dilemma. When taking a photograph of a person performing a function of everyday life, the photographer has to decide where the focus should be: zoomed in, detailed, capturing the essence of the individual – a young child's victorious toothless smile after catching a ball tells a story. But, for the camera to capture the broader scene requires stepping back from the individual to create a composition in which the scene tells the story. The same playground scene showing groups of children playing while one girl stands forlornly off to the side watching tells a different story.

To achieve a full understanding of the events, meanings, and educational processes of a culture, both the individual and the culture must be carefully and closely considered; each in turn must be focussed on, and the particular interrelationship must be understood. We cannot fully understand what is happening in the situation where one child stands off to the side as others play unless we understand how and why groups are formed in that particular culture, and then look at the individual and his or her motivations, interactions with others, and relationship to the culture itself. Furthermore, we need to understand how these matters evolve over time. A snapshot can be misleading if what we want is an understanding of underlying realities. Perhaps a second after the shutter snapped, the child standing off to the side saw her friends and ran off to join them.

In the field of the anthropology of education and in educational research, we have had rich ethnographic studies describing cultures of learning and the values, beliefs, and behaviors fostered by those cultures. Such descriptions

have provided valuable insights into the motivations and goals of members of the culture and have provided explanations for otherwise inexplicable behavior. We also have had lucid, revealing, and perceptive case study research which has enriched our understanding of the role of individual values, beliefs, and social and cognitive preferences. What we have not had, to any great extent, in educational research, are studies which integrate both the figure and the ground, paint rich ethnographic portraits of a culture, illuminating the role of teaching and learning in the culture, and which also look closely at individuals within that culture, seeking to understand the varied ways that different individuals with their unique backgrounds and cognitive patterns come to learn and develop within the framework of a particular culture. The studies we have had, which have looked closely at both cultures and individuals have tended to focus on young learners in school contexts (Bussis, 1985; Cazden, 1982; Dyson, 1988; Dyson, 1989).

Erickson (1982) comments on the need for more specificity in educational research which uses standard ethnographic methods and indicates that such specificity could be achieved by looking more closely at individuals interacting in the everyday scenes of cultural life:

What gets lost in the standard ethnographic literature is the specific character of the learning environment and the individual's interaction with it. In the absence of more specific data on the individual's engagement with immediate environments, anthropologists can make only global statements about the content of human learning and the conditions under which it takes place. This will suffice as long as the main interest of social and cultural anthropology is in characterizing patterns of social organizations and culture writ large, at the level of the whole society or group. If we really want to study the process of human learning, however, it is necessary to look much more closely than we have done at individual thought and action as it takes place in the immediate environments of learning. (p. 152)

Erickson (1982) has developed a theory which begins to integrate an understanding of learning environments and the individuals who live within them. The theory rests on the principle of the mutually constitutive nature of education: the learning environment and the participants in it

continually and profoundly create one another. Erickson's model *begins* to address this mutually constitutive relationship because he offers effective theoretical principles for understanding learning contexts at the interactional level. However, the theoretical principles he proposes for understanding the role of the individual are confined to the ways that individuals interact with specific learning contexts, an important component, but only one of many critical components which constitute the individual dimension of a theory of teaching and learning. Individuals have values, goals, cognitive styles and preferences, and personal agendas that manifest themselves outside of learning contexts. These elements form the rich tapestries of an individual human life and are accessible when we talk to people in depth about their opinions, goals, and desires and when we observe them interacting over a wide spectrum of events with a wide variety of people.

This study will develop a more robust theoretical foundation for examining the role of the cultural context and the individual in teaching and learning and describe a combination of research methods which can be used effectively to illuminate the figure, the ground, and their interrelationship.

The Cultural Context

Since describing culture is the focus of anthropological research, defining culture is central to the discipline. Goodenough (1976) has defined culture by saying:

The culture of any society is made up of the concepts, beliefs, and principles of action and organization that an ethnographer has found could be attributed successfully to the members of that society in the context of his dealings with them. (p. 5)

Culture may be viewed as an adaptation. Based upon the particular conditions of the times, groups make adjustments, develop beliefs, values, behaviors and practices that maximize the group's chances for survival, growth, development, and prosperity. These adaptations become its culture. Cultures also tend to be conservative: they serve to maintain the status quo. Thus, cultural norms and values tend to sustain and maintain roles, status, and class structures, replicating the existing models. This is not to say that cultures do not change. They do. However, change is a complex process

which occurs as different groups negotiate and renegotiate their relationships to one another and the world outside their cultural boundaries. Those with greater power and status tend to hold to the cultural values and practices which support their position in the culture while those with less power and status may have a different relationship to such cultural values (Gearing, 1973; Gearing, 1982; Hansen, 1979; Jenkins, 1983; McDermott, 1974; Ogbu, 1982; Wilcox, 1982). In order to insure that those with less power and status have reason to accept the dominant group's cultural values, beliefs, and practices, most cultures have a status mobility system which enables movement up and down the social hierarchy (Ogbu, 1982).

Spindler and Spindler (1987) provide a definition of culture which unites the definition with the methods of understanding it:

In any social scene within any setting, whether great or small, social actors carry on a culturally constructed dialogue. This dialogue is expressed in behavior, words, symbols, and in the application of cultural knowledge to make instrumental activities and social situations 'work' for one. We learn the dialogue as children and continue learning it all of our lives, as our circumstances change. These are the phenomena that we believe we study as ethnographers – the dialogue of action, interaction, and meaning. We observe behavior and we interview any 'native' who will talk with us. When we are in classrooms, we observe the action and talk to students and teachers, principals, counselors, parents, and janitors. We observe, formulate and ask questions, observe some more, record behavior by various means, including film or video, and ask yet more questions, until the patterns of behavior and native explanations coalesce into repetitive sequences and configurations. We try to determine how teaching and learning are supported and constrained by understandings, many of them implicit, that govern the interaction of teachers and students. The dialogue around what is to be taught, and how much of it is to be learned, how the teaching and learning will be conducted, and how it is actually conducted is what we try to record and interpret as ethnographers of education. (p. 5)

Individuals in a Cultural Context

To understand individuals engaged in teaching and learning within a cultural context such as the workplace, we need to understand the native or

emic cultural meanings as well as the ways that individual goals, meaning systems, and cognitive approaches affect learning. We need to understand both the ways that contexts affect individuals and the ways that individuals affect contexts. For example, a single event such as a "one-on-one," a meeting between a manager and her employee, become very different events depending upon the individuals participating in them. In this sense the theoretically "same" contexts become very different contexts. A committed manager and a highly motivated employee may have a conference with a rich exchange of ideas and a great deal of personal warmth. One between an indifferent or insecure manager and an alienated employee may be filled with tense moments, forced and superficial exchanges, and a feeling of hostility.

Cultural and individual differences between the participants may greatly affect the climate and contents of the interaction (Erickson, 1982; Freedman, 1985; Gumperz, 1982; Heath, 1983). Conversely, individuals participating in such events may display values, attitudes, and behaviors that make them seem to be very different individuals than they would if we observed them on the football field, in a meeting of peers, or with their families. (Cazden, 1982; Philips, 1972; Shultz, 1982). The employee who appears alienated and unmotivated with an authority figure, may display enthusiasm or commitment with peers. Some who display little interest in work may display great energy and commitment in achieving other goals. This interrelationship between context and individual becomes a key to understanding what, why, when, how, where, and with whom people learn most effectively. Erickson (1982) highlights these issues and the challenges that are involved in studying them.

The task in studying learning is to learn how to focus closely on the trees without forgetting that the forest is there too. The dilemma points up a fundamental and unresolved issue in the social sciences: how to demonstrate relations of mutual influence between general social organization and the actions of individuals in specific social circumstances. A clear conception of these influences across levels of organization, from the macro to the micro and vice versa, has eluded the social and behavioral sciences. Studies of learning that are adequately specific cannot wait for someone to figure out the micro-macro theory gap, however. In fact such studies of learning could help to bridge

the gap. For anthropologists to do this, it will be necessary to learn to think much more specifically than in the past about what people do and about the immediate circumstances of their doing. (p. 153)

Erickson's (1982) theoretical model for understanding the organization of learning environments begins to describe the interrelationships among the levels of meaning which come into play in any learning event. It consists of three levels:

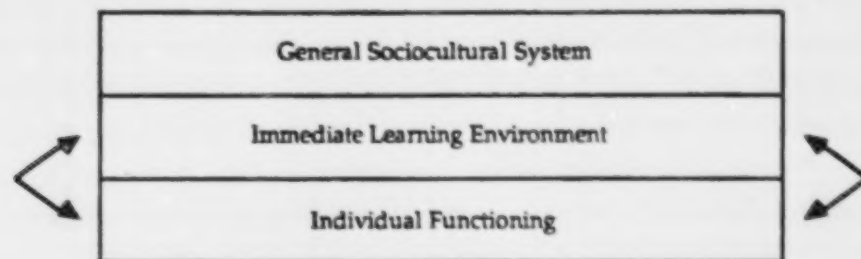


Figure 1: Relationships Across Levels of Organization

Theories Pertaining to Each of the Three Layers

Theorists and researchers in the fields of education, social psychology, sociology, organizational behavior, cognitive science, sociolinguistics, and anthropology have explored each of these layers of influence on human thought, feeling, and behavior. Educational researchers have been particularly interested in determining the impact of these influences on teaching and learning. In order to understand how employees learn to perform their jobs and participate in the culture of the workplace, the most adequate explanations can be achieved by examining each of the three layers: (a) general socio-cultural system, (b) immediate learning environment, and (c) individual functioning and the interrelationships among them.

General Socio-Cultural System

At the broadest, or most macro level, we can achieve insights by adopting a socio-cultural frame of reference. The overarching cultural system plays a powerful role in shaping outcomes in all events and certainly in teaching and

learning. The cultural system determines social roles, acceptable behavior, models of success, and the status mobility system, all of which play critical roles in learning interactions and outcomes.

The connection between learning and cultural values is elaborated upon by Ogbu (Ogbu, 1974; Ogbu, 1982a; Ogbu, 1982b; Ogbu, 1987) and others (Hansen, 1979; Wilcox, 1982a; Wilcox, 1982b) who have developed an ecologically oriented educational anthropology. This theoretical perspective examines the relationship between the values and beliefs of a culture and the choices and actions of its participants. It takes a multi-level approach to understanding the educational process, "integrating economic, political, cognitive and behavioral structures into a single frame of analysis" (Ogbu, 1982, p. 34). The thread which runs through all of these levels of analysis is the status-mobility system, the culturally approved means by which individuals can move up through the cultural hierarchy.

All cultural groups have their own theories of what it takes to make it. These theories are embodied in the advice parents give to children, the sayings and folk wisdom that are expressed among family members and friends, and in the stories and folklore of the community (Ogbu, 1982; Ogbu, 1987). This cultural knowledge creates images of ideal, successful people, those who get ahead in the system. Such images influence the strivings and actions of individuals. People tend to become invested in education and other enterprises aimed at enabling them to get ahead to the degree that they believe these efforts will pay off. Such folk models of success are highly prevalent in the workplace and play a key role in determining what employees learn, why they learn, how, where and from whom they learn.

Immediate Learning Environments

The immediate learning environment is composed of two strands: the social task structure and the academic task structure.

The social task structure. The social task structure is determined by the social roles in the culture and the participation structures assigned to those roles. Roles determine who does what, when, where, how, and why.

Participation structures determine: what questions is it appropriate to ask? how? when? where? and of whom? Issues that are frequently explored in this frame of reference include: How does learning affect the prospects for changes in status? What mechanisms help or hinder social mobility? How do teachers and gatekeepers make decisions about what they teach, whom they, and how they teach? How do they consciously and unconsciously arrive at and communicate their expectations? What are learners' expectations for themselves and how are they arrived at? What are learners' attitudes towards teachers and gatekeepers and how are these arrived at? What methods of teaching and learning does the individual respond to?

Research in this area has contributed to our understanding of how learning events and educational contexts affect learning outcomes and academic success. This research explores the ways that teaching and learning is helped or hindered by the expectations, assumptions, and interactional patterns that individuals bring to the scenes of learning (Cazden, 1982; Erickson, 1975; Erickson, 1982; Gearing, 1982; Labov, 1982; McDermott, 1974; Mehan, 1979; Philips, 1972; Philips, 1982). In the workplace the answers to the questions posed above determine who learns the workplace curriculum that leads to individual success and how the outcomes of individual learning lead to business outcomes.

Academic task structure. The second part of the immediate learning environment is the academic task structure – the overt or manifest curriculum. Research questions that illuminate this perspective include: What is the cognitive content of an educational encounter and how is it taught and learned? What subject matter is considered valuable and important in a given culture and how and why has that culture traditionally structured and transmitted that knowledge and information in a particular way to particular members? How does the brain process and integrate new knowledge and information? Researchers who have worked from this perspective have examined the acquisition of cognitive achievements and the contexts in which they occur (De La Rocha, 1985; Gladwin, 1985; Hayes, 1980; Lave, 1982; Lave, 1985 ; Murthaugh, 1985; Scribner, 1973; Scribner, 1985).

Individual Functioning

Ultimately, learning is a constructive act that depends on the learner's contribution of meaning. Educational research...has typically been concerned with questions other than the learner's contribution, or else it has tended to assume that the majority of learners construct similar meanings from objectively similar situations. (Bussis, et. al., 1985, p. ix)

What is uniquely human about human acts is that they are characterized by intent and meaning. Thus, the subject matter of educational research and the data from which theories need to develop are the personal meanings and intentions of the individuals involved in learning. This is not to say that comprehensive theories explaining how group characteristics, curriculum, and contexts contribute to learning are not important outcomes of educational research. It is to say, however, that, unless the data which examine teaching and learning events and outcomes are based upon understandings of how and why individuals construe meaning, then the bricks from which the comprehensive theories are built will not support the structure.

Individuals strive to make their experience as meaningful as possible. For this reason, understanding the complex networks of meaning that guide individuals in interpreting new experiences and information stands at the core of understanding teaching and learning. Perhaps the most comprehensive and flexible theory for understanding how individuals construct personal meaning is Kelly's (1955) Theory of Personal Constructs. Kelly was a practicing psychotherapist; his theories are grounded in and have been tested and refined by clinical practice.

Kelly's theory is based upon a metaphor of the person-as-scientist. In the manner of scientists, individuals go through everyday life trying to understand it and gain some measure of control over it. The style and temperament of the individual contributes to the way that events are experienced and construed. Thus, each individual's experiences and temperament play key roles in the ways they build meaning systems. Kelly describes the formation of these meaning systems with another metaphor he uses frequently, the concept of an individually created template.

Life involves the representation or construction of reality. Man looks at his world through transparent patterns or templates which he creates and then fits over the realities of which the world is composed. (pp. 8-9)

These templates or constructs enable people to chart a course of behavior based upon their best understanding of how the world operates and how particular people and events fit into their working model. As new events, experiences, and people come into an individual's realm of experience, he or she needs to incorporate them into the existing system or modify the system to accommodate them. In this sense, life is an ongoing process of assimilation and accommodation, learning and developing. Kelly says that, "learning is not a special class of psychological processes; it is synonymous with any and all psychological processes " (p. 75). When seeking to understand individuals engaged in thought and action, the significant question to ask is not *if* a person has learned, but rather *what* a person has learned. This axiom is especially relevant in educational research. Learners who are not learning the overt, school or workplace-sponsored curriculum are, undoubtedly, learning *something*. It is as important to understand what they *are* learning and why as it is to understand what they are not learning and why.

For Kelly, learning and experience are synonymous. Learning "is not what occasionally happens to a person; it is what makes someone a person in the first place" (p 75). However, Kelly did not believe that all constructs are equally valuable. The most valuable constructs are those which are most permeable. They will admit and accommodate new elements without losing their definition and ability to continue to predict and function efficiently. This capacity to embrace new elements, calls for permeability, "a construct which takes 'life in its stride.' "(p.81).

When a person must move, he is confronted with a series of dichotomous choices. Each choice is channelized by a construct. As he reconstrues himself, he may either rattle around in his old slots, or he may construct new pathways across areas which were not previously accessible. When he is under pressure, he is not likely to develop new channels; instead he will tend to reverse

himself along the dimensional lines which have already been established (p. 128).

In selecting how to interpret new experiences, individuals choose that interpretation which will serve to either extend or define their existing system. "Definition" calls for an interpretation which secures, confirms, consolidates, or in more extreme cases rigidifies the existing system. "Extension" calls for openness to novel interpretations and less secure positions and actions. It involves stretching and developing one's capabilities and mental landscape, but it also involves risk and some anxiety which comes with moving in uncharted territory. Individuals do not seek the novel and more risky interpretation at every available opportunity. Learning proceeds in series of growth spurts and plateaus. Times of growth, creativity, risk, and novel interpretation are followed by periods in which the new constructs can be consolidated and applied so that the new learning is well integrated and comfortable. Even so, different individuals have different comfort levels with the relative proportion of extension to consolidation. For effective learning to take place the right balance needs to be established.

These principles are highly relevant to learning in the workplace. In businesses based upon rapid change and the need for rapid decisions and risk-taking, the effective employee is one who can tolerate a high proportion of extension and a low proportion of consolidation. Those who contribute effectively are those who feel comfortable and function well under circumstances in which a high degree of learning takes place under conditions of change and risk and who are willing to readily relinquish past ways of doing things as changing conditions make past solutions less effective than new ones.

Summary of Theoretical Models

The overarching socio-cultural system, the immediate learning environment and individual functioning all exert influence on the nature and outcome of teaching and learning. Education is a process that can be looked at through a variety of lenses; each focuses on a somewhat different aspect of the process and has a somewhat different perspective. Educational anthropologists

(Gearing, 1973; Ogbu, 1974; Ogbu, 1982; Ogbu, 1987; Philips, 1982; Wilcox, 1982) have traditionally examined the ways that teaching and learning are affected by the values, attitudes, roles, and structures of the culture within which education takes place. A growing group of educational anthropologists, cognitive psychologists, sociolinguists, and educational researchers practicing microethnography and other methods of natural inquiry (Dyson, 1989; Freedman, 1985; Gearing, 1982; Heath, 1983; Labov, 1982; McDermott, 1982; Ogbu, 1982; Richardson, 1987; Richardson, 1988; Shultz, 1982; Sperling, 1988) have examined how teaching and learning are affected by the characteristics of immediate learning environments such as speech patterns, participation structures, group dynamics, shared meanings and values, and teacher and learner expectations. Psychologists, sociolinguists, and educational researchers using contextualized case study methods have illuminated how learning is linked to the ways that individuals construct meaning (Bussis, 1985; Dyson, 1985; Dyson, 1987; Dyson, 1988; Kelly, 1955; Richardson, 1986).

Literature Review of Learning in the Workplace

All of these strands of research on teaching and learning are applicable to the workplace although the theories and methods have just begun to be applied to this key cultural setting. In fact, most of the instances of traditional educational research studies on learning in the workplace have been conducted in exotic and primitive locations. Traditional educational research has, for the most part, ignored the American workplace. However, at least three separate bodies of research and theory based upon the disciplines of organizational behavior, adult learning, and instructional design have been focused on the American workplace, and especially on the American corporate workplace. This section provides a review of the literature on learning and behavior in the workplace.

Discussions about creating a learning organization are heard increasingly in business circles. The cover story of a recent issue of *Fortune*, a magazine highly respected by many business leaders, read:

Forget your old, tired ideas about leadership. The most successful corporation of the 1990s will be something called a learning organization, a consummately adaptive enterprise with

workers freed to think for themselves, to identify problems and opportunities, and to go after them. In such an organization, the leader will ensure that everyone has the resources and power to make swift day-to-day decisions. Faced with challenges we can only guess at now, he or she will set the overall direction for the enterprise, after listening to a thousand voices from within the company and without. In this sense, the leader will have to be the best learner of them all. (Dumlaine, 1989, p. 48)

The concept of a learning organization has been in organizational behavior literature since Lewin's work which spanned the period from 1920-1947 (Lewin, 1935; Lewin, 1945; Lewin, 1947; Lewin, 1947), but has received renewed interest as businesses grapple with ways of remaining competitive and successful in the face of the accelerating pace of change and accumulation of new knowledge. The learning organization as described above offers a compelling goal and one for which many companies strive: individual employees empowered with the knowledge and ability to make and implement sound and successful business decisions. However, the goal is difficult to achieve, and researchers in a variety of fields have sought to uncover effective ways of achieving it.

Overview

At least three different areas of inquiry have contributed to our understanding of learning in the workplace: (a) adult education and instructional technology, (b) organizational behavior, (c) education, educational anthropology, and sociology. The theoretical foundations and research traditions underlying each of these areas differ, and in fact a wide variety of approaches exist within each of these three broad areas. This section will explore each of the three areas and their major contributions to our understanding of learning in the workplace.

Adult education and instructional technology are emerging academic fields and have focussed upon on-the-job training for over forty years. The focus of these fields has been on practice rather than research. Because the field is young by academic standards, and because of its orientation to practice, its theoretical and research traditions are less developed than those in the two other areas. However, the people responsible for employee training in the

workplace typically have degrees or professional training in adult education or instructional technology. Therefore, to understand their approach to learning in the workplace, it is important to understand their intellectual roots (Cross, 1981; Gage, 1981; Knirk, 1986; Knowles, 1984; Mager, 1984; Weisbord, 1987).

Organizational behavior has been studied for over a century and is part of the curriculum for virtually all business degrees at the undergraduate and graduate level. A wide variety of qualitative and quantitative research has been done in this area. While, much of it has focussed on motivation, job performance and productivity without an explicit primary focus on learning, some studies have addressed questions targeted at learning in the workplace (Horton, 1986; Kotter, 1988; Leavitt, 1986; Lewin, 1935; Lewin, 1945; Lewin, 1947; Lewin, 1947; Maccoby, 1988; McCall, 1988).

Traditional educational research has focussed primarily on learning in classrooms by students in the educational system. Only a few researchers (Lave, 1982; Lave, 1985; Moore, 1981; Moore, 1986; Scribner, 1984; Scribner, 1985) have applied educational theory and methods to studying the workplace, and in many cases, the workplaces studied involve exotic or primitive cultures. Researchers with intellectual roots in education, anthropology and sociology have begun to use ethnographic methods to study learning in the workplace and these studies have yielded valuable insights unavailable through other methods (Bellah, 1985; Kanter, 1977; Kanter, 1983; Philips, 1982; Richardson, 1986; Richardson, 1987; Richardson, 1988; Scribner, 1985).

The time is here for these different fields of inquiry and practice to begin interaction and dialogue. Such a cross-pollination has much to contribute both theoretically and practically to one of the most common and significant contexts of adult learning: the workplace. The following review of literature summarizes some of the recent work which bears directly on the study which follows.

Adult Education and Instructional Technology

In attempting to train employees to meet the demands of their jobs, most businesses have focussed on adapting traditional methods of formal education to the workplace. The approach overwhelmingly used to address the need for employee training involves classroom learning. This approach has proved problematic. However, in the absence of more effective approaches, to those charged with the task of employee training, it often appears to be the only game in town. Therefore, a large body of work on employee training and adult learning has developed and continues to develop at a rapid pace.

The theories and research studies in this area focus on job training and skill acquisition and look at learning in classrooms and other formal settings. One of the reasons that these approaches have proved problematic is that frequently the learning and development that employees need to be effective as "knowledge workers" consists of a complex mix of cultural and task knowledge, knowledge which is highly specific to particular contexts and the solving of particular problems. Classroom instruction generally needs to decontextualize these situations and develop generic curriculum which can only be useful if the employee can effectively transfer what was taught to his or her particular job situation. Such transfer often does not take place. In fact much of the most effective learning employees do takes place during the process of doing the job. For the most part, adult education and instructional technology have not focused on understanding the ways that individuals learn in the informal, everyday scenes of the workplace.

The man often credited with being the Father of Adult Learning, Malcolm Knowles, who now has spent over fifty years researching, teaching about, writing about, and implementing adult learning programs, said in a 1977 interview (Jones, 1981):

In the 40 years that I've been in the business of training and educating adults I've seen a lot of innovation. But, I have seen more innovation, more new knowledge, more ferment in the last five years than in the previous 35. If that is any indication, the next 20 years are simply going to be revolutionary. We're on the verge of coming up with a whole new way of organizing our national educational enterprise. I believe the organizing concept

for that enterprise will be lifelong education and the training and development of lifelong learners (p. 614).

Knowles' belief that adult learning enterprises will burgeon in the coming years is supported by the fact that the U.S. spends over \$40 billion a year on management development alone (McCall, 1988). In 1987, personal and business training were a \$110 billion industry, and that figure is expected to double by 1991 (Robbins, 1990). Training and employee development have indeed become big business. In addition to money invested in this enterprise, more and more corporations have created and expanded training or human resource development departments whose charter is to provide job training to employees. A growing number of businesses are devoted to employee training. Corporations often hire these training companies on a contract basis to develop and/or deliver training to their employees.

The people interested in and responsible for developing and delivering these training programs have expended their energies both on meeting the pressing practical needs at hand as well as on building a core of knowledge and theory which can be used to guide the practice of developing employee training. This groundswell of activity in the field of formal employee training has two major schools of thought: one group is made up of the followers of Knowles and his adult education theories and practices and the other includes the proponents and practitioners of a field known as instructional technology, also known as instructional design, educational technology and other similar titles. Robert Mager is frequently thought of as the father of this school of thought. Although the two schools of thought are not mutually exclusive, the principles underlying the field of adult education tend to view training as one component in the broad context of the learner's experience. The principles underlying instructional technology are aimed much more specifically at ways of achieving discreet, task focussed, measurable objectives. A deeper view of each of these schools of thought follows.

Androgogy as an Approach to Learning in the Workplace

The field of adult education known also as androgogy (as opposed to pedagogy) is based upon five premises (Knowles, 1984). First, that adult

learners are self-directing, take responsibility for themselves, and resent and resist when others impose their wills. Second, that adults have a great volume and quality of experience from childhood and youth which creates a reservoir of resources upon which they draw. They also have habitual ways of thinking and acting which may limit learning. The full range of adults' life experience increasingly shapes their sense of identity. When not valued and made use of in educational activities, learners feel that, not only their experience, but they are being rejected. Third, adults become *ready* to learn when they experience a life-centered need to know or need to do. Fourth, that generally, adults learn when they have a life-centered motivation such as a task to accomplish or a problem to solve. They therefore respond to learning experiences organized around these life situations rather than around subject matter units. For example, for adults in the workplace, a course on Writing Business Letters generally will be perceived as more relevant and motivating than one called Composition 101. Fifth, that adults are primarily motivated by internal motivators such as self-esteem, recognition, and self-actualization rather than external motivators such as increased salaries or promotions.

These principles are the basis for much of today's adult education. They have been applied to a wide variety of workplace settings and subject matter,

from individual courses at every level of education to total programs of in-service education,...professional education, technical training...It appears in almost every institution, [all levels of] ... schools, business and industry, government agencies, health agencies, professional societies, churches and voluntary organizations - in North America and around the world (Knowles, 1984, p. 20).

These principles also have wide popular appeal because they focus on teaching adults practical job skills which they can use to perform job tasks and solve workplace problems. Perhaps because its objective is so practical and the results often appear convincing, the principles have been embraced by those interested in achieving practical workplace objectives. Proponents of androgogy have promoted these principles and taught them to professionals responsible for adult education. However, as a relatively new academic

enterprise, it has been less concerned with testing its assumptions and examining its results with the yardstick of academic research (Cross, 1981). Because the goal of workplace training is improved job performance, that has served as the yardstick used to measure effectiveness. However such a yardstick is highly subjective and the result of innumerable variables other than training. Thus, establishing the efficacy of adult education principles has been an illusive and largely unsuccessful endeavor.

Instructional Technology as an Approach to Learning in the Workplace

Since most professionals responsible for the development of employee training have been trained in the principles of instructional design or instructional technology, when they design and develop courses for adults in the workplace they usually follow the practices advocated by this discipline. For example at Just, most of the people in the training program either have master's degrees in instructional design or have been sent by Just to training programs on the methods of instructional design developed by Robert Mager. This reliance on the Mager method is found at many other high technology companies and many large businesses as well.

According to this method, there are five basic procedures to follow in the course development process (Knirk, 1986; Mager, 1984). First, training needs are addressed by conducting a needs analysis aimed at defining the desired successful job performance. This needs analysis leads to the second step, developing measurable instructional objectives that capture the performance of the job-specific tasks. Upon completing the instruction, students need to demonstrate an observable change of behavior. Instructional technology finds "a change of behavior" to be a useful definition of learning. Furthermore, subject matter that cannot be stated in terms of measurable objectives, and topics that do not result in observable behavior changes are considered inappropriate for teaching with these methods. This premise, in and of itself, severely limits the domains to which this method of teaching can be applied. The study which follows demonstrates how much of the curriculum of the workplace involves subject matter which does not lend itself to such learning objectives.

Once appropriate course objectives are determined, the third step requires selecting an appropriate mix of media to teach the objectives. Fourth, course materials are developed. And fifth, a test which matches the instructional objectives is developed so that, at the conclusion of the training, trainees' can demonstrate mastery of their ability to perform the tasks specified in the instructional objectives.

Yet, in spite of this carefully crafted behavioral approach to teaching job skills, employees often do not or cannot transfer the skills and knowledge acquired in the training program once they are back on the job. This is a critical failure for training because successful and improved job performance, not passing the obligatory test at the end of the training session, serves as the litmus test for training in the workplace. A recent article in Training magazine (Gordon, Zemke, Jones, 1988), a journal for training professionals, sought to find theoretical concepts that would provide insights on the issue of transfer of training. The article began this way,

"The empirical studies of transfer of training have provided a wealth of practical suggestions for enhancing the value of training in the world of work."

If you bought that, please consult the authors immediately for a once-in-a-lifetime opportunity to buy over-water real estate in a borough of New York City.

The truth is, as you cynics have guessed, that once again the laboratory has let us down. Not only is there little clear-cut evidence that doing particular things will help transfer learning to the job environment, there isn't even much consistent theory behind why transfer does and doesn't occur...We would like to believe that "good training" means training that transfers to on-the-job performance. For many, however, the result of "doing good training" is simply improved end-of-training performance. (p. 415)

That statement captures one of the key challenges faced by those responsible for employee training. The field of instructional design or instructional technology is young by academic standards. In its twenty-five year history it has evolved "both theory and practical tools and techniques...[that] may be applied in analyzing, designing, producing, evaluating, implementing, and

managing instruction" (Knirk, 1986). The theory upon which this field rests is largely behavioral. The early instructional materials developed using this paradigm were linear-programmed sequences based upon Skinnerian principles of stimulus-response as they are applied to learning. The field is evolving and drawing increasingly upon adult education principles to include a broader look at the instructional experience and the role that the learner plays.

This approach to instruction has become the overwhelmingly accepted method used in business and industry. In on-the-job training programs where employees need to learn specific job tasks, this approach provides a systematic, documented method for "achieving desired outcomes." Traditional educational institutions have not, for the most part, utilized this approach. Its behavioral emphasis seems at odds with current thinking on the most effective approaches to education. In fact, practitioners of instructional technology view themselves as professionals in training and instruction, not education, a field which is broader and has objectives which frequently are not quantifiable. As Knirk and Gustafson (1986), in their text on instructional technology, say:

To date, the inertia of a large, diversified, and labor-intensive institution like education has restricted its exploration of the potential [of] Instructional Technology. However, the industrial and military training communities have widely accepted it and sponsor and conduct most of the research in the field. (p. 11)

They go on to make the point that, as public schools, vocational schools, and institutions of higher learning have increasing needs to demonstrate their instructional effectiveness, they have shown heightened interest in instructional technology. It is important to note that, if the measure of effectiveness is a test score, on a test tailored to instructional objectives and administered immediately following training, then the definition of effectiveness will not necessarily correlate with effectiveness outside of the classroom. Furthermore, many factors in the workplace culture and within the individual exert a powerful effect on the individual's performance outside the classroom. These are issues that fall outside of the rather

narrowly circumscribed domain currently addressed by instructional technology.

The research which has been conducted in this field, including numerous research reviews, [Anderson, 1967; Glaser, 1976; Resnick, 1981; Wittrock, 1977] has focussed on investigating the effectiveness of instructional technology as a means of improving performance. To date, the research has been inconclusive. Much of the research is correlational, and instructional outcomes result from an array of complex variables, many of which cannot be quantified. After analysis of numerous research studies on instructional technology over an extended period of time, the general consensus has been that quantitative research is inevitably weak in identifying causal effects. Scientific approaches do not validate these or other methods (Barbatsis, 1978; Gage, 1981; Knirk, 1986; Wilkinson, 1980). Wilkinson (1980) summarizes the research in saying, "The results of several decades of research nevertheless...can be summed up as 'no significant difference'" (Knirk & Gustafson, 1986, p. 220).

Summary of Adult Education and Instructional Technology Principles and Practices

Adult education and instructional technology theories and principles dominate the formal programs and practices for teaching and learning in the workplace. Both of these approaches are directed at teaching employees job skills and that end result, skill acquisition, shapes the learning activities which are created. Although both disciplines stress the importance of adapting instruction to individual learning styles and individual's prior knowledge, among the variables and influences that are not addressed in research on these approaches are the role of the culture of the workplace and the role of the individual in determining learning and work objectives.

In today's information age, set in a global economy, with fierce competition, and an accelerating pace of technological innovation, the nature of work changes rapidly and the pace of work is sometimes almost frantic. To survive and succeed, employees must learn and develop within a system which rarely explicitly and directly teaches them what they need to know. The types of formal learning opportunities that adult education and instructional

technology are concerned with developing, do not constitute the majority of learning on the job. Most of the learning and development which takes place happens informally.

By the time a course is developed and employees can make time in their busy schedules to take it, the contents is not new. The "time critical" information, skill, knowledge, and problem-solving that constitutes much of the curriculum that keeps companies on the cutting edge and profitable, can't be packaged into courseware quickly enough. This curriculum is most frequently taught on-the-job during the process of working and engaging in the problem-solving process. In this sense, much of the most significant workplace learning is a by-product of striving to achieve work objectives. The consolidation and integration of what has been learned in this way often happens retrospectively, after a job has been done and the results of one's actions can be assessed. Experience is the teacher, and learning is the fruit of one's labors. Teaching and learning are part of the fabric of the workplace, the subtext of all actions and interactions.

Organizational Behavior

Another domain that addresses, to some extent, issues of learning and development in the workplace is the field of organizational behavior. This discipline takes a much broader view of individual behavior in business contexts and examines the relationships among individuals and their personal meaning systems and the values of both the work culture and American society (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985; Kanter, 1977). Research in this area generally has not closely examined how learning in the workplace actually takes place in real time in the scenes of everyday life at work. However, many studies based upon large samples and primarily using surveys and interviews have identified different social types, explored employees' motivations and studied how successful and less successful individuals learn and develop through experience on the job (Horton, 1986; Kotter, 1988; Leavitt, 1986; Maccoby, 1988; McCall, 1988).

In the field of organizational behavior, a great deal of theory and research has focussed on the ways that people relate to one another, to their jobs, and to

the organizations within which they work. From 1920-1947, Kurt Lewin studied behavior in organizations and developed key theories and insights which have profoundly influenced American corporations and workplaces. He studied leadership, and its effects on the workplace culture. He was particularly interested in the productivity-enhancing effects of participatory styles of leadership and culture. He developed the concept of force fields based on the principle that we act to resolve tensions in our life space. The relative force of various competing drives, desires, and constraints cause individuals to make decisions and behave accordingly. One can "move" a problem and change the course of action selected by increasing drives or reducing restraints. Field theory is one contribution reflecting Lewin's interest in looking at individuals and jobs as part of a larger system. For example, he studied textile workers and found that those who were successful organized their total work flow to cope with disruptions like broken threads and empty spools. It was not just skill at specific job tasks, but an understanding of the whole process of work that led to their effectiveness. He showed that manual dexterity tests for prospective textile employees were not adequate to indicate which workers would best cope with the demands of the whole job (Lewin, 1935; Weisbord, 1987).

Lewin's theories of participative management originated through a collaborative research project between Lewin and anthropologist Margaret Mead. During World War II, there was a need to reduce civilian consumption of rationed foods. Mead pointed out that in family units, wives were the "gatekeepers" for family food consumption. In order to increase consumption of nonscarce meats these gatekeepers needed to change their food purchasing and preparation practices. Lewin set up a comparative experiment. Half the groups of homemakers were lectured by expert nutritionists on what they should do and why it was important. The other groups were given facts and information and invited to collaborate and decide what they wanted to do. The participatory groups proved to be far more successful in changing their food habits than those given expert advice (Lewin, 1945).

This, and other research, led to a core principle of Lewin's work: we are likely to modify our behavior when we participate in problem analysis and

solutions and likely to carry out decisions we have helped make. Involving employees in analyzing and solving workplace problems forms the bedrock of social learning in organizations. This principle led to the subsequent principle that, attempting to change individual behavior is a weak, even futile strategy. Productive workplaces would result, instead, from community involvement and responsibility, and this would motivate individual change, learning, and work (Lewin, 1947a; Lewin, 1947b).

When implemented, these concepts are frequently said to result in a learning organization, the effective workplace discussed at the beginning of this section, in which employees' commitment to achieving organizational results leads them to learn what they need to know to accomplish goals they have had a role in determining.

Education, Educational Anthropology, and Sociology

In the fields of sociology, educational anthropology, and education, a small body of ethnographic research has been aimed at understanding the ways that people learn in the context of their work. Three key ethnographic studies which contribute to our understanding of learning in the workplace follow. Kanter (1987, 1973), a sociologist who studies business organizations, has used ethnographic methods to explore the social and cultural dimensions of American business. Bellah, et. al. (1985), a team of sociologists and an anthropologist, have used ethnographic methods to study the varied ways that Americans find meaning in their lives. Their study includes an in-depth examination of the ways that employees of high technology companies find meaning through work. Moore (1981, 1986), an educational researcher, has conducted research which closely examines how learning takes place in a wide variety of contemporary American workplace settings. His research explores the many social, cultural, and cognitive factors that affect learning outcomes and success on the job.

Kanter's Ethnographic Study: The Workplace as a Shaper of People

While few in-depth ethnographic studies of learning in the workplace have been reported, Kanter (1977) used an ethnographic approach to illuminate

"life in the large corporate bureaucracy from the inside." Her study begins with a quote from Drucker (1974): "The shift in the structure and character of work has created a demand that work produce more than purely economic benefits. To make a living is no longer enough. Work also has to make a life." This notion captures the theme of Kanter's study. She examines the ways that large organizations shape the lives of employees. She calls it "people production." Kanter's study focuses exclusively on a particular organization called Indsco and explores the ways that the organization "forms people's sense of themselves and of their possibilities" (p. 3).

Kanter describes the culture and history of the corporation and then examines the "dilemmas and choices" (p. 5) inherent in organizational roles which call for individuals to choose stances that solve the problems created by their positions. The description and analysis of the cultural background then serves to support an investigation of how individuals respond to opportunity and power.

Kanter has identified and analyzed the politics both of those who do and those who do not move up the corporate ladder. The issues are examined from the point of view of an integrated theory of organizational behavior, a perspective which seeks to illuminate the ways that individuals engage with their work. She wants to understand what motivates individuals' ambition and commitment. Then she seeks to understand how individuals who are motivated to achieve success in the workplace think and act to realize their ambitions. One of the significant findings and themes of her study is that success at work is directly related to the ways that people acquire and manage power. "People skills," the ability to show sensitivity to others, is, she finds, far less important than the ability to command and use power and influence.

This is one of a number of studies demonstrating that choices about how to relate to other people (listen to their problems? offer praise?) fail to make much, if any difference in effective management – at least by themselves.

What does make a difference is *power* – power outward and upward in the system: the ability to get for the group, for subordinates or followers, a favorable share of the resources, opportunities, and rewards possible through the organization.

This has less to do with how leaders relate to followers than with how they relate to other parts of the organization. It has less to do with the quality of the manager-subordinate relationship than with the structure of power in the wider system. (pp. 167-68)

Summarizing this theme, she touches indirectly on the relationship between power and teaching and learning. Those who are moving up the corporate ladder find it in their best interest to adopt a style and relationship with others that results in a context conducive to teaching and learning.

Mobile managers are likely to behave like 'good' leaders *because* of their opportunity, whereas nonmobile managers behave in the rigid, authoritarian way characteristic of the powerless...*Promotable* supervisors...are more likely to adopt a participatory style in which they share information, delegate authority, train subordinates for more responsibility, and allow latitude and autonomy. They do this, first to show that they are not indispensable in their current jobs - to show that someone else could indeed take over when they advance. They also find it in their political interest to delegate control as a method of training a replacement, so that the vacancy created by their promotion will be filled with someone on their team. (pp. 172-3)

And conversely, she found that,

For people at Indsco, having a powerful boss was considered an important element in career progress and the development of competence, just as lack of success was seen as a function of working under a dead-ender. People wanted to work for someone on the move who had something to teach and enough power to take others along. (p. 173)

Kanter's findings emphasize the importance of the broad socio-cultural factors in the corporate culture as key influences upon teaching and learning. With regard to the factors she outlines, subordinates will not be able to develop their abilities and display their talents; they will be thwarted from engaging in the most fruitful teaching and learning opportunities and from fully developing their potential, if they are working for a manager who wants to retain control and power and restrict employees from learning too much and threatening his position. Maximum opportunities for learning,

development, and increased responsibility result from working for a manager who is in a position to benefit from their development. Furthermore, the greatest investment in teaching will go to those who are already the most capable and most promising because it is assumed that they will make best use of the training they get.

While Kanter's study looks at individuals within the organization, she does not develop case studies of individuals, nor is she primarily interested in the individual's point of view. She is working from a sociological perspective and is primarily concerned with broad social, cultural, and organizational issues. Unlike this study, Kanter has not tried to examine, in depth, the patterns of thought and action of individuals as they learn how to make meaning within a particular workplace culture.

Bellah et al. Ethnographic Study: Work as a Way of Creating a Meaningful Life

While Kanter's study examines the many ways that employees use work "to make a life," Bellah and his colleagues (1985) have looked at life in America in order to examine the many diverse ways that individuals create meaning. They take a much broader perspective than Kanter and other researchers of the business world. Their canvas is life, and the world of work is just one component. In their broad-ranging study of the American character, Bellah and his co-authors, a team of anthropologists and sociologists, sought to answer questions such as "How ought we to live? How do we think about how to live? Who are we, as Americans? What is our character?" (p. vii). In their attempt to uncover American cultural values, one of the areas Bellah et al. examined is the relationship between work, success, and the ways that individuals find meaning in their lives.

The data for this study were gathered through participant observation, interviews, and in-depth portraits of particular individuals who provide insights in answering the research questions. The authors find that the need for intimacy and a desire to succeed become tangled together in the workplace. "Individuals who meet only on the job make use of intimacy as a method to become more effective as a working 'unit.' Their sensitive and

caring conversation is not a break from the job. It's part of the job" (Bellah et al., p. 123). One woman, describing her boss says, "She'll bring in homemade cookies and flowers for your desk [and] at the same time she'll do anything necessary to get the organizational results she wants and advance her career" (Bellah et al., p. 125).

The need to integrate personal social relationships and business objectives is a key theme in the American workplace. Because work has come to occupy such a central place in the lives of so many individuals, they want and need to derive personal meaning and satisfaction from their jobs. In addition, because so much work in contemporary society involves managing information, working on teams, and interacting with people to get the job done, the social and the task dimension are intertwined. As Just's values say, "Teamwork is essential to Just's success, for the job is too big to be done by any one person." This is true in most corporations today. Learning to work effectively on teams and yet not allowing the agendas of individual team members to pull the team off course in meeting business objectives becomes a critical skill to master. In addition, since individual rewards come to those who distinguish themselves from the team while working on the team, most employees try to find a balance between being a good team player and "looking out for number one." In Bellah and his colleagues' study, a manager describing what she has learned to do to be successful says,

I've learned to listen to myself and listen to other people, step into their shoes and see it from their perspective. I've also learned not to over-identify, since that gets in my way as a manager... [in] a conflict situation, where someone is trying to make you angry...you have to know it's there and behave as though it's not. Don't raise your voice, don't put them down. Don't lose control. Own your own projections, and make them take responsibility for theirs. Don't get hooked into their stuff...It is a jungle out there, and you *do* have to look out for number one, but you can do it without hurting people and creating more jungle. (p. 125)

One portion of their book which is particularly relevant to the study at hand is an in-depth portrait they present of Brian Palmer, a Silicon Valley businessman, whose values and relationship to work are similar to those of

many people at Just and throughout corporate America. In an interview Palmer says,

I went in the Resources Management Program, which is made up mostly of graduates from engineering schools, mostly the top 10 percent of the class, and I finished number one in my class through that. Then I went into the Budget Office, which is made up of the top 1 percent of that group and I finished in the top 1 percent of that group, so I figured, O.K. I can fit in that league, and I have proven that, so now let me go out and set about making a name for myself. In 1972 I was what they call on our structure rank four and in 1978 I was rank fourteen. My salary had increased three times over. (p. 67)

In response to Palmer's self-assessment, Bellah and his colleagues reflect,

Literary self expression [a former interest of Palmer's] gave way to competitive self-advancement up the rungs of training "classes" set in a corporate ladder. Mastery of a discipline, for Brian, mattered less than finishing first in the class, since learning itself was chiefly a means of making it to the top of an organization structured by chains of supervisory control and salary scales...Yet work means more to Brian than the goods it buys and the status it secures. Most of all, it defines him in terms of his "performance" in comparison with others. (pp. 67-68)

These portraits of individuals reveal their theories of how to be successful and the ways they enact their theories. What is revealed reflects both the individuals and the corporate culture in which they function as well as the overarching American society in which we live. Bellah et al. have contributed to our understanding of the American character and the underlying cultural values which form it. He and his colleagues have not attempted to examine the ways that these cultural values are transmitted through face-to-face interactions nor have they addressed the ways that people acquire the task and cultural knowledge required to perform their jobs.

Moore's Ethnographic Studies: The Social Structure of Learning on the Job

Moore (1981, 1986) has studied student interns in apprenticeship work programs in order to achieve insights regarding on-the-job learning. He and his research team have described the results of three years spent studying over thirty internship sites ranging from a museum to a small single-owner wood-working shop to an animal protection league. The research team spent time observing and collecting data in the on-the-job learning contexts and interviewed both the teachers and the learners.

In his search for "forms of social interaction in which instruction and, more broadly, education happen," among Moore's key findings are the uncovering of a pattern of interaction in the workplace which corresponds to Mehan's (1979) uncovering of the initiation, reply, and evaluation sequence frequently used in classroom teaching (I-R-E). Moore concludes that, in the workplace, the analogue to learning a lesson is a "task episode." In observing interactions that appear to constitute instruction between supervisors and students, the pattern Moore and his colleagues encountered had three parts: 1) the task was *established* for the student 2) the task was *accomplished* (or not) by the student 3) the student's performance on the task was monitored or *processed*.

Based upon this pattern, Moore and his team found it was most fruitful, both theoretically and practically to operationalize thinking and learning in the workplace as a process that results in problem solving and performing tasks. These tasks are established by a supervisor or other who represents the workplace's goals to the employee. When the employee has attempted to accomplish the task, it is evaluated in terms of its success in meeting the workplace's objectives. This feedback serves to guide the employee's future actions. Moore emphasizes that although these social interactions form the observable core of education in the workplace, the cognitive style, temperament, initiative, personal experience and compatibility of personalities involved in the interactions also play a tremendous part in determining "how the educational scenario is acted out" (p. 298).

Summary

Each individual who begins a new job arrives at the workplace with a personal meaning system which will guide interpretations of the events he or

she observes and experiences on the job. This personal meaning system develops through the influence of the individual's family, cultural, educational, and social history as well through the influence of the individual's psychological, cognitive and other unique personality characteristics. Through the lens of that personal meaning system, individuals see and relate to their world and seek to acquire the cultural and task knowledge required to perform their jobs. This acquisition is a multi-layered process. Level 1 includes the role of the socio-cultural system within which learning takes place, Level 2 deals with the engagement between the individual and the learning environment, and Level 3 examines the ways that the individual dimension affects the way that goals and tasks are defined, teachers are engaged, learning opportunities are created, previous experience is brought to bear, and meanings are constructed and enacted.

A wide body of work provides a foundation for looking at learning in the workplace on all three levels. Anthropologists have developed theories and conducted studies of how socio-cultural values are transmitted (Level 1); educational, sociological and anthropological researchers have conducted studies of how individuals think and act as they try to integrate their personal and cultural values with the socio-cultural goals and values of social institutions in immediate learning environments such as schools and workplaces (Level 2); and educational researchers and psychologists have developed theories of how individuals learn (Level 3).

Studies of the workplace to date are divided into those which focus on skill acquisition and look at learning in classrooms and formal settings for teaching and learning, and those which look at organizational behavior, broadly examining the relationships among individuals and their personal meaning systems and the values of both the work culture and American society.

A body of studies of learning in American workplaces is long overdue. Studies of how employees learn in corporate workplaces are particularly lacking. Studies in the areas of adult education and instructional technology, which have focused on the corporate American workplace have examined learning through formally designed training programs or materials, not on

true on-the-job learning, the context in which most learning occurs. Studies of organizational behavior have focused primarily on organization values, structures, and function and only peripherally on teaching and learning. Furthermore, most of the data gathered for these studies have been derived from limited visits to work sites, interviews, and questionnaires (Milwid, 1987; Peters, 1982; Peters, 1987; Drucker, 1974). While some studies have components of participant observation (Bellah et al., 1985), and ethnographic approaches (Kanter, 1977), the periods of observation, by anthropologists' standards, are brief and the participation by the researcher is limited or peripheral.

A relatively new, and so far small, body of research on anthropological approaches to the study of organizational culture is beginning to emerge. A recent issue (Fall, 1989) of the *Anthropology of Work Review* was entirely devoted to this topic. While this work is beginning to develop anthropological approaches to the study of organizational cultures, none of the articles dealt with the issue of learning in the workplace.

To date, few studies have sought to achieve insight into the ways individuals acquire both the cultural knowledge and the task knowledge necessary to perform their jobs, how individuals' belief systems about success affect what they learn at work, how belief systems evolve in the workplace, and how individuals enact these belief systems. In previous studies (Richardson, 1986; 1987; 1988), I found that, at work, individuals must often invent the solutions to the problems they face. No teachers or textbooks with answer keys guide employees as they grapple with complex and unique problems which frequently demand quick and novel solutions. The personal and resourceful ways that individuals learn to perform their jobs needs further study.

This study aims to look more broadly and deeply at the the ways individuals learn and develop at work by examining how these issues are lived day-to-day by individuals in a particular workplace through an in-depth ethnographic, participant-observer study of one high technology, corporate workplace with case studies of individuals in that workplace.

I am interested in helping to demystify this area because I believe that doing so will enable individuals to work more consciously and productively towards success, as they choose to define it. It will also enable employers and schools to provide the support systems, tools, and contexts that best facilitate individual success.

Research Questions

The following are the formal research questions I seek to answer in this study about learning at Just Computers:

1. What are the cultural contexts and underlying cultural beliefs and values that are related to learning?
2. How is learning achieved in this workplace?
 - a. What motivates learning in this workplace?
 - b. What are the key components of the workplace curriculum?
 - c. What are the key learning opportunities through which this curriculum can be learned?
 - d. What are the alternatives to learning?
 - e. How is learning demonstrated and rewarded?
3. How do particular employees learn and develop in this culture?
 - a. What are the sources of personal satisfaction of the four employees selected for case study, and how do these sources of satisfaction shape the way the employee works and learns?
 - b. What themes emerge in the employee's meetings (one-on-ones) with his or her manager?
 - c. What does the employee learn from his or her manager in these meetings?

Chapter 2 describes the data collection procedures and methods of analysis used in this study. The three results chapters (Chapters 3-5) examine each of the three layers of the model presented in this chapter. Chapter 3 examines layer one, the general socio-cultural system, and answers the first research question, what are the contexts and cultural beliefs and values that are related

to learning. Chapter 4 examines layer two, the immediate learning environment, and answers the second research question, how is learning achieved in this workplace. Chapter 5 examines layer three, individual functioning, and answers the third research question, how do employees learn and develop in this culture. Chapter 6 discusses the key findings and their theoretical and practical significance. It serves to highlight the implications of this study for both workplace learning and learning in schools.

—CHAPTER 2—

DESIGN OF THE STUDY

This study consists of two main parts: an ethnography of the workplace culture and case studies of individuals within that culture. The sections which follow describe the setting, the participants, and the data collection and data analysis procedures for both parts of the study.

Setting

The High Technology Industry

High technology offers a challenging industry in which to study teaching and learning on the job. This industry is characterized by extremely rapid change in the marketplace and tremendously rapid advances in the technology and products created. It is also a highly competitive industry, with competition coming from all over the world. Asian businesses present formidable competition. But key opportunities and customers, not only key competition, come from all over the world. "Think globally" is a phrase used throughout the high technology business world. Learning to understand and work with cultural diversity on a global scale is increasingly a business necessity.

These characteristics--rapid change in technology and business conditions, global competition, global opportunities and partnerships, and working with cultural diversity will be key characteristics of many workplaces in the future. They are being addressed in high technology businesses today. Understanding how both workplaces and schools can prepare individuals and work units to be successful in such environments is critical.

Just Computers and the Just Training Department

The study takes place at Just Computers, a corporation in the Route 128 technology center outside of Boston. I selected Just for four reasons. First, Just is known for its success in an industry where change occurs at a dizzying pace. As such, it offers an opportunity to study employees and organizational cultures which respond and adapt to rapid change in the technological and

business arenas. Furthermore, Just's success results, not only from staying ahead of changes in technology and the marketplace, but from staying ahead in ways that are novel and innovative.

Second, Just's cultural milieu and leadership has changed. In its early years, Just rapidly grew from a small start up led by dedicated, idealistic computer gurus with little business experience to a publicly traded, Fortune 500 company. Today the company is increasingly led by individuals with traditional training and experience in business rather than fascination with computers. This cultural shift is classic in companies that grow from start up to maturity.

Third, Just's employee population has grown rapidly. New employees constantly join the ranks. They become enculturated and acquire Just's values, but they also change Just and its values as well. This meshing and evolution of the values provides an important opportunity to study the process of cultural acquisition as well as task knowledge acquisition.

Fourth, in business circles it is often said that, in order to succeed in high technology and other information age industries facing the kinds of demands described above, the traditional, authoritarian management styles and organizational hierarchies will not be effective. "Flatter" organizations, with as little hierarchy as possible, staffed by individuals who are empowered to solve problems and take appropriate action, will be the hallmarks of successful companies in the future. Just displays virtually all of the characteristics of such a "new wave" company. Consequently, Just is frequently cited as a model company for today and the future.

Many new start-up companies model themselves after the culture and business principles Just has followed so successfully. Many older, more traditional companies currently seek to "re-invent" themselves, becoming less hierarchical, leaner, and quicker to respond to market conditions. They, too, have sought to adopt the culture and principles at work at Just. Because of its position and reputation as a model company, and because it also faces the challenges and problems that come with the territory, Just seemed an ideal workplace to study.

Within Just, as within all large companies, there are organizational units such as research and development, marketing, finance, sales, and the like. Each of these units functions as a community, a small distinct culture within the larger corporate culture. These departments have leaders, missions, identities, and values. I wanted to focus on one such cultural unit because, more than Just as a whole, these organizational groups seemed to embody a cohesive sense of community.

I chose to study Just's training department. The training department's major purpose is to develop courses and instructional materials which teach Just's sales force about its products and how to sell them. The sales force consists of both Just employees who are full-time salespeople (known as sales representatives) and computer dealers (known as resellers) who sell Just products. A relatively new and secondary purpose of the training department is to develop training courses that can be delivered to the customers who use Just products.

While it has much in common with many other groups at Just, indeed all groups at Just face and cope with the rapid pace of change, training also has certain characteristics that make it particularly interesting to study. First, the training department provides a highly revealing context for studying learning. As the group responsible for teaching others, members of this group must somehow acquire the skills and knowledge which it is their mission to pass on to sales representatives, resellers and now customers.

Often the knowledge that training needs to pass on to its audiences is not documented anywhere since it concerns products, programs, and issues that are brand new. For the course developers, succeeding at their jobs requires not only the professional skills of instructional design and the technical skills to understand the technology and the market, but also the social skills to draw the needed information from others.

Secondly, the rapid pace required to meet the aggressive deadlines set in this culture and necessary for the company to survive and succeed, lead to a social climate that is marked by almost constant change in goals, strategies, tactics,

and organizational units. The degree of change, the constant uncertainty and the hurried pace are significant characteristics of this environment. This cultural climate causes many employees a great deal of stress, and so functioning effectively while under a high level of stress and working effectively with others who are coping with high levels of stress, also become important skills in this workplace.

Third, my position as both an employee and researcher has provided me with an excellent opportunity for studying teaching and learning in this culture. More discussion on the role of the researcher follows later in this chapter.

The Formal Structure of the Training Department and Its Mission

Just's training department contains approximately 70 individuals formally arranged in hierarchical fashion. (This number varied somewhat throughout the study due to normal turnover and growth.) Most employees are on the first level of the corporate hierarchy, and they are known as individual contributors. This means that they are either given assignments or develop projects which they then complete with a team of other people. They often refer to themselves as "worker bees," "peons," or "pond scum," because they are responsible for doing the work, while those on higher levels of the corporate ladder assign, monitor, and evaluate their work. Sometimes this status as "low-man on the totem pole" makes them feel powerless.

The department is divided into groups based on the different types of training developed or different functions performed. For example, there are several different training development groups such as New Product Training and Sales Training. Most of the people who work in these groups are course developers, responsible for creating the courses the department produces. In addition to course developers, there are also employees providing administrative support. Some groups within the department perform functions other than developing training materials. For example, Testing and Evaluation develops and implements policies for testing students who take the courses, and the Production group is responsible for the printing, artwork, and distribution of the course materials.

Each group is comprised of approximately five to fifteen individual contributors who "report to" a first level manager. The manager is responsible for ensuring that the work is completed satisfactorily and on time, for motivating employees, helping them to develop, and communicating information from the group up to higher management and information from higher management down to the group. A group of three to five first level managers reports to a second level manager, and the second level managers report to a third level manager, who is the director of the training department and whose role is to set and ensure the implementation of the group's goals and strategies.

Physical Make-Up of the Training Department

The physical layout of the training department is similar to the design throughout Just and at many other high technology corporations as well. Instead of discreet rooms with doors for offices, all employees are assigned a "cube," a modular space bordered by fabric-covered walls approximately six feet high. There are no doors on these cubes. When one enters this office space, it appears to be a giant maze made up of these modular cubes. Because there are no traditional walls and no doors, it is easy to hear conversations and other sounds that occur around one's work area. In addition, since the noise level and distraction level is quite high in such an environment, it often requires quite a bit of effort to shut out the distractions and attend to one's own work. Conversely, it is easy to become involved in conversations and informal meetings that are occurring within earshot and, while looking busy, and perhaps learning about interesting activities in the company, actually be neglecting the work for which one is directly responsible.

Each individual cube is furnished with modular units of a desk, file cabinets, a phone, and a computer. While these units themselves are plain and each is constructed in an almost identical fashion, individuals move into their cubes and do a great deal to personalize them. Personalizing touches range from plants to photographs of family to posters and other artwork, to displays of the awards and momentos that the employee has received at work. Many employees have other equipment besides the computer system assigned as a basic tool. Those working on projects that involve other types of computers,

peripherals and other electronic equipment often have it set up in their cubes. In fact some cubes are quite filled with this additional equipment. Among some employees, the amount of electronic equipment housed in their cubes becomes a status symbol.

A "Typical" Work Day in the Training Department

Most employees arrive at the office by 8:30 a.m. While no one monitors an employee's hours or activities, the demands of getting the job done, attending meetings, and working with peers serve to structure the individual's time. By 8:30 am the phones are ringing, the click of keyboards can be heard, and the buzz of conversation in the halls is in full swing. This hum of activity continues through the day as employees attend meetings, hold informal conversations with one another, both about work and their personal lives, and engage in the tasks they need to perform to get the job done. People frequently comment on, and sometimes complain about the number of meetings that are held at Just. Because teamwork is so important, and collaboration and consensus are critical in effective teamwork in this culture, people spend a great deal of time in the many conference rooms scattered throughout the work space. At any time of the day, people can be seen engaged in discussion and decision-making in the open-for-view, glass conference rooms which are a tradition at Just.

Overlaying the formal organizational chart is the informal network of friendships and relationships that also affect who talks to whom about what, when, where and why. These informal networks of friendship lead to socializing and sharing of personal and professional topics of interest, and they play their role in the office grapevine.

By 5:30 p.m. many employees are beginning to leave, many with briefcases full of work they will do when they get home. Others stay at work until 7:00 or 8:00 at night. When project deadlines are looming, it is not unusual to see employees working until 10:00 p.m. or later and coming into the office on weekends as well in order to do what they need to do.

Participants in this Study

As I set out to conduct this research, I distributed a letter to all the employees of the training department so that they could decide if they wanted to participate. I offered two options for participation: first, participation in the general ethnography which meant a willingness to have one's actions described, and one's meetings audiotaped, transcribed and used in the study and second, participation as a focal individual which meant a willingness to be followed closely for two to four weeks while I attended virtually all meetings with the focal individuals and shadowed them as they worked in their cubes, at their computers, on the phones, or engaged in hallway conversations and informal meetings. Focal individuals would also be interviewed extensively and might be asked to allow me to spend time with them in their homes or other contexts outside of work. Almost all employees chose to participate in the general ethnography and seventeen volunteered to be focal individuals. This level of interest in participating in this study indicates, I believe, employees' desires to tell their stories and to better understand their own behavior as well as the underpinnings of the culture in which they work. Many came to me to tell me how interested they were in the themes I was exploring and how interested they would be in learning what I discovered through the study.

Participants in the Ethnography

To examine levels one and two, the sociocultural system and the immediate learning environment and to answer research questions one and two: how do cultural beliefs and values affect learning and how is learning achieved in this workplace? I drew on ethnographic data based upon participant observation in the training department at Just. The population of the training department varied between 70 and 100 individuals during the year of this study. This study is based upon data was gathered from 64 individuals with whom I talked, interacted, spent time, observed in the workplace, or conducted interviews. During data collection I often "stumbled" upon rich sources of data and individuals who had much to tell. Since I spent quite a bit of time in the coffee room--a cultural hang-out, and sitting in the break room--another gathering place, I found myself talking with a wide variety of people

who came in and stayed to talk with me and with one another. I also attended numerous meetings with a wide number of department members.

Participants in the Case Studies

In order to understand how individuals learn in this culture, I selected four focal individuals to follow closely over a period of two to four weeks each. Selection of the focal individuals was governed by two main criteria. First, they needed to be willing to discuss, in formal and informal interviews, their views about work, learning, success, personal values, and their personal and professional histories. They also needed to be willing to allow me to tape, observe, and describe the interviews and their participation in meetings and interactions both at work and outside of work. Secondly, I wanted to look at a group which represented a wide range of employees. They needed to represent a variety of experience and skill levels, a variety of approaches to learning, a range of social backgrounds.

Because I didn't know what issues and comparisons would be most salient when I began the case study portion of the study, I gathered data on six individuals who met the above criteria. As the key issues began to surface, I selected four focal individuals.

I chose course developers as the focal individuals because, after spending time with a variety of different employees, it became clear that the course developers are at the core of this organization and understanding their learning process would be an important contribution to the department. During my early periods of observation, I realized that each of the course developers I spent time with learned very differently. I also spent significant periods of time observing employees who are not course developers. I found that their jobs called for different skills, and so the "curriculums" they needed to fashion for themselves in order to acquire those skills were quite different from the course developers. A comparative study of the different learning processes of employees in different job functions within the department seemed interesting, but less theoretically significant than a study of the different ways that individuals in theoretically the same job learned.

Therefore, the four focal individuals, Violet August, Jean O'Donnell, Don Lauritzen, and Sean Miller are all course developers.

Violet August

Violet is a woman in her early forties, somewhat older than the average Just employee. She has been at the company for three years, and before coming to Just, she worked for three years developing training materials at another large corporation. Prior to that, she and her husband worked for the Peace Corps in southeast Asia, bringing with them their young child and having a second child while abroad. Violet frequently talks about her experience in the Peace Corps and how much she enjoyed that close-to-the-earth lifestyle. Violet was a liberal arts major in college and is a lover of the arts and humanities. She sings, reads poetry, and has a deep appreciation for art, music, and literature. She loves relating to people and is happiest when interacting with others. Violet's husband has been a graduate student in anthropology for the past six years, and during this time, she has been the primary supporter of the family.

Violet had quite a bit of success in her first two years as a course developer for Just. During this time the prevailing practices and organizational structure called for her to play the role of facilitator, communicating to a team of writers an agenda for course content which was determined by others. She spent most of her time coaching, motivating, and supporting this team of writers who developed the courses she was responsible for. During the period I observed Violet, her manager and the nature of the job had recently changed. She was called upon to be a project leader and had primary responsibility for determining the agenda for course development. She was also called upon to juggle many more tasks than she had previously, and to know more about the technology, the marketplace, and the audience than she had previously. In addition, she began working for Catherine Pierce, a manager she greatly admired and wanted to please, and yet by whom she was intimidated.

Jean O'Donnell

Both Violet and Jean work in a group which develops training in the less technical areas. They both report to Catherine. Unlike Violet, Jean had worked with Catherine for approximately five years, and they had a

comfortable friendship and mutual respect. Jean, also in her early forties, is married, but with no children. Her husband is a jazz musician and, like Violet, she is their primary supporter. Jean describes herself as a workoholic who invests many, many hours in her job and enjoys it a great deal. She is viewed as a very capable course developer. After five years, she is one of the old timers in the training department and someone who is sought out as an expert in certain areas. Prior to her career at Just, Jean had worked as an editor for a magazine. She has bachelor's and master's degrees in Chemistry and enjoys working with and learning about technology. Jean also has a strong interest in the arts and humanities, reads widely, and is involved in the jazz community.

Violet and Jean offer interesting contrasts to one another. They have very different relationships with their manager, Catherine. They also have different relationships to technology. Violet is not very interested in technology and does not believe that is her strong suit, while Jean is very interested in it and believes she has an aptitude for it. In general, Jean is quite confident of her abilities. She feels comfortable taking on primary responsibility for determining course contents, leading a team, and, when necessary, writing course materials herself. Violet speaks often of her lack of confidence in all of these areas.

Don Lauritzen

Don, in his late-thirties, had been at Just for a little over a year at the time of this study. He is a quiet, soft-spoken man with a quick wit and a good sense of humor. He works in the more technical training group and reports to William Jones. His educational background is in engineering, and he has spent all of his career working for technology companies. He has worked as a systems engineer, someone who goes to customer sites to assist sales representatives by setting up computer equipment, doing demonstrations,, and assisting customers in using, troubleshooting, and repairing systems which are down. Don has developed training materials for other companies as well. He has always had a strong interest in technology and understanding "how things work."

At Just, Don has contributed effectively to the various teams he has been on. He has not sought a leadership role and isn't interested in moving up the corporate ladder. The parts of his job he enjoys most involve working with the technology and troubleshooting when things don't seem to work the way they should. He is least interested in the politics of the organization. He and his wife have a strong interest in sailing and hope to retire from their jobs within five years in order to spend most of their time sailing while working at freelance jobs to support themselves. Don and his wife, a physics professor, have no children.

Sean Miller

Sean is in his late twenties, single, and had been at Just for three years during the time I conducted this study. He, too, reports to William Jones in one of the groups involved in developing technical training. Sean has an educational background in engineering and has worked in the computer field for all of his professional life. Sean has been described as "intense," and this word describes much that he does. He works hard, and puts a great deal of himself into his work and his relationships with those he works with. He is emotional, opinionated, and expresses his opinions zealously. He seeks and generally takes on a leadership role in the teams he is on. During the time I spent with Sean, he was the team leader on a team which also had Don as a member.

Although he frequently discusses the politics of the organization and is vocal about the directions he believes the department should take and the people he believes should have responsibility, he says that his primary interest is the technology, not climbing the corporate ladder.

Sean and Don offer interesting contrasts to one another, as well as to Violet and Jean. Sean, like Don, has had an interest in how things work and has experimented with chemistry and electronics since he was a child. He spends many hours at his computer "playing" with state of the art products. While both Sean and Don claim that climbing the corporate ladder does not constitute status for them, during the time of the study, Sean was seeking a management position. Don had a comfortable relationship with his manager, William, although he realized that William was not a strong

leader. Sean was frustrated and upset by the fact that William was not viewed as effective and said that, as a result, he had stepped in to unofficially act as the group's manager.

Role of Researcher: Managing the Risks of Being an Active Participant in the Culture

My position as an employee of this group for the past four years provides an opportunity for the kind of participant observation rarely available to those who are not members of a cultural community. Throughout these four years, I have acquired a great deal of cultural knowledge: I have experienced much of the history of the culture, learned the folklore, the values, the patterns of interaction, and have gotten to know many of the people and their histories and interests inside and outside the organization. Philips' (1982) spent a year as a law school student in order to create an ethnographic study of the socialization process of lawyers. In describing her role as a participant-observer she says that,

It is clear that participant observation does enable the investigator to see things from at least one structural position of membership in the system being studied and to acquire in-depth knowledge of whatever persons in that position must know to maintain the position...I did benefit considerably from the in-depth access to the socialization process that my position as a student allowed. There were certain features of the socialization process that would not have been available to me or present in my analysis of that process, had I not labored diligently as a student...I would not have had the contextualized shared knowledge...(p. 205)

Philips' description of the benefits of occupying a position of membership in the system apply as well to my role as active participant in Just's training department. Through the socialization process and the process of experiencing day-to-day life, I was able to acquire a level of understanding available only to members of a culture. Such an in-depth understanding is simply unavailable to those who have not experienced cultural membership.

Wolcott (1988), in making distinctions among participant observers who are *active participants, privileged observers, and limited observers*, notes that, "the role of the active participant has been underutilized in educational research. I encourage those pursuing ethnographic approaches to give careful consideration to opportunities for being active participants rather than passive observers" (p. 194).

Wolcott further points out that, while providing the significant benefit of first-hand understanding of a culture, active participation also has risks. These can be effectively managed if appropriate techniques are employed. Being an active member of a culture, with a job to perform, diverts time and energy from the research enterprise. To address this issue, I worked part-time during the data collection, analysis, and early writing phases of this study and arranged for time off to complete the writing.

Another potential risk in settings where the participant-observer is also a member of the culture is relying on one's own interpretations of the culture, rather than eliciting interpretations from key informants and other members of the culture. To manage this risk, I have asked individuals within the culture to read or listen to and evaluate my interpretations. Where they had different perspectives or had additional information, I revised my interpretations appropriately. I followed this practice of collaborating with others in the culture throughout the study.

A final risk to be managed is best captured in a quotation attributed to Margaret Mead (Spindler, 1982), "If a fish were to become an anthropologist, the last thing it would discover would be water" (p. 24). Active participant-observers need to "make the familiar strange" (Spindler, 1982, p. 24). This perspective can be achieved by gathering data from a variety of perspectives: by asking individuals who are members of the cultural group as well as colleagues outside of the cultural group to offer interpretations of portions of data. I employed these strategies in conducting this study.

Observation Schedule

My formal observations and data collection activities for this study began in July, 1989 and continued through the middle of February, 1990. I began analysis in February, 1990 and continued to return to collect additional data and check interpretations with trusted Just colleagues through August, 1990.

The following chart summarizes the schedule of data collection and procedures used.

Table 2-1 Data Collection Schedule and Procedures

Date	Ethnography: Major Procedures	Case Study: Major Procedures
July, 1989	Begin formal observations and data collection, 3-5 times per week -talk with employees throughout dept. -take field notes	
August, 1989	as above plus -begin audiotaping and transcribing meetings, interviews Begin reflections on key themes, and writing theoretical memos on them	Identify 10 possible focal individuals Select first focal individual: V. August
September-October, 1989	Continue ethnographic work as above	Begin observation and data collection on V. August. Identify key learning opportunities for study across all focal individuals
October, 1989-February, 1990	Continue ethnographic work as above Begin analysis of data: identifying key themes, developing coding strategies	Select three additional case study individuals Conduct observation and data collection on three case study individuals Transcribe all relevant data Write theoretical memos Begin analysis of data: identifying key themes, developing coding strategies
February, 1990-June, 1990	Develop analysis procedures and coding categories Begin intensive analysis of data Continue to gather data to reach saturation in establishing validity of key findings Conduct triangulation interviews	Develop analysis procedures and coding categories Begin intensive analysis of data Continue to gather data to reach saturation in establishing validity of key findings Conduct triangulation interviews
June-August, 1990	Final analysis, writing of ethnography Continue to triangulate with participants	Final analysis, writing of case studies Continue to triangulate with participants

Ethnography: Observation Schedule and Data Collection Procedures

From July, 1989 to February, 1990, I observed the workplace as a whole and collected data on a wide variety of activities, interactions, events, written communications, artifacts, and physical settings in the training department. During the period of data collection, I was in the workplace two full-days

(from approximately 8:30 a.m. until 6 p.m.) and two to three half-days each week.

The data collected consist of field notes; audiotape recordings of meetings, interactions, and interviews; written communications; and my own written reflections. These written reflections consist of observer comments about the events and interactions described by the field notes as well as separate theoretical memos which serve as ongoing analyses of the ways activities I was observing reflected theoretical principles.

Each day I would tape record or take extensive notes on meetings, interviews, and interactions that I observed or in which I participated. When I got home, I re-wrote my field notes, fleshing them out as I did so. I also transcribed much of the tape recorded data as I gathered it. This practice is usually not followed because it is extremely time consuming. However, I chose to transcribe as I went along because I was searching for themes that would guide me as I progressed. I felt that I needed to see the talk I was recording in order to begin to see these themes. The process of transcribing, while time consuming, is also a powerful way of thinking about the words and thoughts of others. I gained many insights during transcribing and wrote them up in many memos which became part of the data set. I also was able to see striking similarities and differences between individuals as I transcribed.

As the study progressed and I identified key themes I wanted to explore, I then became more focused in transcribing and was able to transcribe only the portions of tapes that related to these key themes and summarized segments that did not seem related.

The body of formal data includes 72 sets of field notes. I catalogued and summarized the contents of these field notes so I could more readily review the complete data set. This catalogue of the data also made it easier to select and reference complete field notes more readily during the analysis phase. This record of all the events and field notes for this study can be found in the field note index in Appendix A.

Case Studies: Observation Schedule and Data Collection Procedures

From September, 1989 through February, 1990, I observed and gathered data on the four case study individuals. The first case study individual was Violet August and it was during my time with Violet that I clarified what data I would gather from the focal individuals.

I observed and gathered data on Violet from September through the third week of October, 1989. I spent from four to eight hours per day with her. At the time of my observation, she was working on a project which involved many evening activities, several lasting until late into the night. I spent more time with Violet than with the other focal individuals because I was less certain about how I would develop the case studies. I knew I wanted to closely examine learning interactions, but I wasn't sure what interactions would be most fruitful. I spent over three months with Violet. I took extensive notes and audio and videotaped over 32 hours of interactions and interviews and transcribed 22 of them. Sifting through these data helped me to narrow down the field of key interactions that I would examine for each of the focal individuals.

Based on my experience and understanding of the culture, the early period of ethnographic data collection, and the extended period of time I spent with Violet August, I identified four data sources for the case studies. Three are workplace interactions that represent key learning opportunities for employees: (a) the one-on-one with manager, (b) the team meeting, and (c) informal conversations. The fourth (d) is an in-depth interview with each focal individual.

In addition to representing key learning opportunities, each of these different activities provides a unique window into the individual employee's value system and the way that value system interacts with the cultural value system. The three workplace learning opportunities represent key events during which both task and cultural knowledge and values are transmitted. By observing employees engaged in these activities and talking to them afterward about their thoughts and feelings about what transpired, it is

possible to begin to understand how the individual accomplishes workplace objectives and solves work problems while meshing the cultural values of the workplace with his or her own. This approach also provides a way of looking closely at individuals' cognitive approaches to problem solving and working. By studying four different individuals in these theoretically "same" contexts, it is also possible to see how different individuals create different contexts and "go after" learning what they need to know as they work against deadlines to produce their work.

For each of the focal individuals, I observed, audiotaped, transcribed and took field notes on each of the three types of learning opportunities and conducted, audiotaped, and transcribed at least one formal interview. All audiotapes, transcripts, field notes, and written products were included in the case study analysis.

The transcription procedures I followed for both the case study data and the general ethnography were the same. I transcribed all talk exactly as it was spoken, eliminating only uhs and ums and other backchannel cues which did not have any significance to the speaker's meaning. Where these linguistic features were beyond the norm, I have noted them in the analysis.

Data Analysis

Ethnography: Data Analysis Procedures and Methods

To answer the three major research questions and their subquestions, I worked from two complementary perspectives. The first perspective involved creating an ethnography which was aimed at satisfying what Goodenough (1956a, 1956b, 1957) considered the fundamental goal of ethnography: the characterization of a culture from the natives' point of view, paying attention primarily to the cognitive distinctions made by the members of the culture. Goodenough further points out that an ethnography always involves a selective focus and an implicit theoretical framework. The theoretical framework used has been described in Chapter 1. The selective focus for this study consisted of viewing the culture primarily through the eyes of the course developers, the group of people within the training

department of which I was a member. It is also the group which is functionally at the center of the department's mission. This focus enabled me to draw most effectively upon the in-depth accumulation of knowledge, experiences, and data that I had collected both formally and informally during my four years as a participant in the culture. This perspective enabled me to describe "the big picture," and to articulate its components. Drawing upon the data I had gathered over four years as a participant observer, I was able to identify the key areas that contribute to the most descriptive ethnographic portrait and illuminate how learning takes place in this culture. This perspective guided me in structuring the analysis and presenting the findings and interpretations.

Ethnography is rooted in the belief that understanding of a culture comes from direct and face-to-face encountering of the social processes being studied. During the four years that I spent as a participant observer, I gathered a great deal of data in this manner. The sources of the ethnographic data are numerous and varied. They include informal interviews and conversations with approximately 200 employees over a four year period and participation in over 4,000 hours of face-to-face interaction in this workplace, including observations and participation in hundreds of meetings ranging in size from two participants to company-wide meetings that included over five thousand employees. Because of my status as a participant, it was not always possible to tape record or otherwise capture verbatim the interactions I was involved in or observed. During the three years prior to the official data collection for this study, I documented these interactions without a great deal of systematicity. Primarily, I captured key interactions and events by writing journal-like memos and, when possible, writing down, verbatim, key portions of particularly important interactions. I also saved many written memos and other documents which described and captured the tenor of the important issues, events, and accomplishments of the training department during those years. During the year of official data collection, I recorded and transcribed interactions much more systematically, took field notes, and wrote numerous memos to myself. I also collected and included in the analysis documents, memos, newsletters and instructions circulated through the department. These data collection procedures have already been described.

As I assembled these data and wrote interpretations based upon them, I wanted to be sure not to fall into the trap Wolcott identified as a potential one for ethnographers who are participants in the culture they are studying: relying too heavily upon one's own interpretations. To avoid the trap, I consistently asked at least three members of the culture whose opinions I trusted to read and critique my interpretations. Where they had insights or differences of opinion, I expanded my interpretations accordingly.

The second method used to arrive at the interpretations presented involved following methods described by Bogdan and Biklen (1982). This method of data analysis which provided a second perspective on the data involved a more systematic method of examining, categorizing, describing, analyzing, and reducing the data. Its objective is to categorize the data in ways that reveal the range, frequency and distribution of behaviors or topics present in a particular setting and among particular individuals and groups.

The activities involved in analyzing the data with this method consist of four basic steps: (a) reading through the complete data set to develop coding categories; (b) testing preliminary coding categories on the data; (c) applying a workable coding system by coding all the data units in the data set; (d) sorting and grouping the data units so that all like units are grouped together.

These methods provided categories and insights that contributed to answers for all three research questions and certain subquestions. I made five separate sweeps through the data, each time addressing a different issue. On each sweep I followed the procedures listed above but coded the data in different ways, depending upon the question I wanted to answer. The steps below provide a more detailed description of the data analysis methods and procedures that were followed for each of the sweeps through the data.

1. Reading through the complete data set to develop coding categories

The first step in data analysis was to gather together all of the data that I had collected. This included all field notes, interview transcripts, transcripts of all meetings, written memos and reports, as well as the comments and theoretical memos I had written during the data collection phase. I organized these data chronologically and read through them all three times for each

sweep, reading with an eye towards developing coding categories which would describe the data. I kept a pad at my side and jotted down categories that seemed to recur and have descriptive importance. After the third time reading through the data, I had a preliminary set of coding categories.

2. Testing preliminary coding categories on the data

I then read through the data again, beginning to test these categories by assigning them to units of data. These "units of data" are the portions of a field note, transcript, or other type of data which deal with a topic described by a coding category. The criteria for these units was topic. The length of a topic unit varied from as large as a paragraph to several sentences to as small as a few words. An illustration of how this coding strategy was applied will be given later in this chapter.

3. Applying a workable coding system by coding all the data units in the data set

As I began to apply the coding categories, I was able to test them; refine them by adding, deleting and consolidating codes; and get a sense of their workability in describing the data in ways that provided insights.

For each sweep, after sifting through the data many times, testing and refining the codes, I arrived at a set which worked well in describing and categorizing the data. For the first sweep, which aimed at categorizing all the talk into coding categories which would reveal the cultural values, beliefs, and themes, many categories needed to be reworked, consolidated, or amplified before a workable set of twenty-six emerged. Sweeps two and three produced shorter lists, five and eight respectively, which effectively captured the topics of the workplace curriculum and the available learning opportunities.

4. Sorting and grouping the data units so that all like units are grouped together

Once the coding categories were established, each unit of data was coded with a number. In the first sweep, I went through the entire data set, studying each sentence and deciding (a) where topic shifts occurred to determine where one unit of data ended and a new one began and (b) what code applied. In that

first sweep, which generated the list of topics that captured the cultural values and beliefs, most units of data overlapped and dealt with more than one coding category simultaneously. For example, in an interview, an employee named Beth, told me about Francine, a new employee she was training. Beth said, "And Francine has always said, 'I don't believe you know all this stuff, and when will I ever learn.' Well, that makes me feel good and I think she knows that." That particular unit of data was coded with three numbers because it covers three coding categories: role models-models of success, learning and teaching, and views of peers.

Once the entire data set was coded, I was ready to begin sorting it. Again, in the first sweep, this was a more complex process than with the other sweeps because most of the data units had multiple numbers. For the first sweep, I made six copies of the entire data set because six was the maximum number of coding categories for any one data unit. In the sorting phase of the process, I literally cut the data into pieces. Folders are labelled with all of the coding numbers and the names of their categories. I assembled the folders in a file box and filed all data units with the same code together in the appropriate folder. This sorting procedure was followed for each sweep through the data in order to generate a set of categories that would account for the data and provide the answers to a particular research question or subquestion.

The Five Sweeps: Five Key Ways of Cutting the Data

As noted, the first sweep through the data was the broadest and most complex to code and categorize. I had hundreds of pages of transcribed talk which represented the entire corpus of data from face-to-face interactions. Within this talk the process of cultural transmission was happening, as was the process of teaching and learning. Because cultural values are embedded in talk, I needed to develop coding categories that would "break" the data in ways that captured the key themes and topics about which people talked. Doing so would begin to reveal the cultural values. I looked at all the talk and activity in the data set in order to determine the topics of talk as indicators of the underlying cultural values and beliefs. For example, in this workplace there was a great deal of talk about the different managers, their styles, the way they related to their staffs and the way their staffs thought

about them. All talk and all other data on this theme was coded with a number which represented the topic: views of management. There were stories about how certain people had refused to follow the rules and, not only gotten away with it, but came to be considered heroes. Such stories were coded with another number which represented the topic: folklore. All of the data was coded in this way yielding a set of 26 categories into which all the data fit. Once these 26 categories of talk were identified, it became apparent that they could be divided into three broad areas: talk about work, talk about the organization, and talk about the culture.

The coding categories that identified all the topics of talk in this workplace illuminated the underlying cultural values and beliefs. Once all the data were sorted, I was able to begin looking inside the different folders to begin interpreting the contents of each. Together these complementary approaches, categorizing and analyzing, provided answers to the first and subsequent research questions. The chart showing the 26 coding categories and the interpretations of the data in those categories are presented in Chapter 3.

Because I was particularly interested in painting a portrait of the culture, I made another sweep through the data focussing on the "hot spots:" the key social issues that captured individuals' interest and concern. In determining how to effectively develop categories for this thick description, I found it fit well in traditional anthropological categories: (a) status in this culture; (b) cultural climate; (c) cultural affiliation; and (d) cultural values. Both a table and discussion of the key issues which emerged in each of these categories contribute to answering the first research question and are also presented in Chapter 3.

Sweeps three, four, and five provided the answers to research question two and its subquestions which reveal how learning is achieved in this workplace. In order to answer the first subquestion: what motivates individual learning in this workplace, it is necessary to understand what different individuals find personally satisfying. The search for personal satisfaction motivates much learning and largely determines how individuals will define their jobs and spend their time. Therefore, the third sweep through the data involved generating categories for the ways that

individuals derive personal satisfaction from work. Using both the data gathered for the general ethnography as well as the data gathered on the case study individuals, I arrived at a set of five key categories with subcategories which described the sources of satisfaction of the many individuals in this workplace on whom I gathered data. These categories are presented in a table in Chapter 4.

In order to understand all the components of the workplace curriculum, sweep four developed categories that covered all the topics of workplace curriculum. In order to understand all the learning opportunities available to employees, sweep five developed categories for all the learning opportunities in which employees engaged. A table showing these categories and an analysis of how they enable employees to achieve learning are presented in Chapter 4.

Using the Data to Answer the Research Questions

Answering each of the research questions involved synthesizing two complementary perspectives, the categories made available through the sweeps and the ethnographic perspective gained from interpreting the corpus of data as well as living in and coming to know the culture as an insider.

In order to answer the first research question: what are the cultural contexts and underlying cultural beliefs and values that are related to learning, I describe the work that people in the department do, the organization and how its members relate to it, and the cultural values and beliefs. Once I understood the culture and its themes, I could determine the relationship between how learning is best achieved in this culture and how particular individuals learn. Gaining these understandings required finding a way to interpret the data so that the key cultural themes emerged.

I used the ethnographic perspective to identify the deep purposes for learning. In the broadest sense, people learn in order to "get the job done." Yet, people define their jobs and what it means to "get it done" in different ways. Chapter 3 provides necessary background information by offering a detailed

description of the workplace and the way work transpires. The chapter answers the first research question by describing:

Work

- (1) how work transpires
- (2) the course development cycle
- (3) the process: activities that employees engage in to get the work done
- (4) the overt curriculum: what employees need to know and do
- (5) rewards and recognition

Organization-People

- (1) achieving affiliation at different levels of the organization
- (2) the corporate goals
- (3) the training department goals
- (4) the organizational groups: the "worker bees," "peons," or "pond scum;"
- (5) specialists views of themselves and their jobs
- (6) management
- (7) reviews: the report card of the workplace
- (6) informal structure of the training department

Culture

- (1) status in this culture
- (2) cultural climate
- (3) cultural affiliation
- (4) cultural values - the unofficial social and cultural division within the training department.

To answer the second research question, how is learning achieved in this workplace, I needed to answer each of the subquestions. These answers would uncover the various motivations for learning and the various ways employees managed to learn or finesse learning what they needed to know to get the job done. Chapter 4 describes how learning is achieved in this workplace by revealing (a) the motivations for learning and how these motivations vary for the two key groups within the department as well as for different individuals; (b) the five key components of the workplace

curriculum; (c) the eight key learning opportunities; (d) alternatives to learning; (e) the ways that learning is demonstrated and rewarded.

Case Studies: Data Analysis Procedures and Methods

The case study portion of this study is aimed at answering the third research question, how do employees learn and develop in this culture? In order to answer the question it becomes necessary to understand the individual agendas that people bring to the workplace and how they affect learning. As I talked to a wide variety of people in the training department, and as I spent significant periods of time with the individuals selected for case study, it became clear that individuals were working hard to fulfill their personal agendas. The subtext of much of their talk and the motivation behind much of their behavior reflected their quest to mesh their job responsibilities with their individual goals.

To achieve insights into the four focal individuals and how they learned to perform their jobs and achieve their own agendas, I read through the entire data set for each individual several times. I searched for themes that seemed to tell that person's story. I also searched for parallel themes which ran through all of the cases. My goal was to uncover each person's agenda, based upon his or her sources of personal satisfaction. This understanding would reveal how each individual shaped and defined his or her job and determined what was learned. I also wanted to find the key points upon which individuals could be compared and contrasted. These points emerged as each case unfolded. Parallel events and moments emerged, and individual issues emerged as well. The parallel events and moments became the stages upon which common themes and differences could be seen most clearly.

One of the most revealing parallel events is the one-on-one. This meeting is a key cultural event, a regularly scheduled meeting between an employee and his or her manager. The one-on-one is a valuable interaction to study because it represents a significant learning opportunity for the employee – the opportunity to learn from one's boss, an individual who represents the organization and its values to the employee and who can also serve as a coach, counselor, and teacher. However, the one-on-one is also the

employee's opportunity to present him or herself to the boss, the person who will be evaluating performance, writing the job performance review, and determining advancement and salary increases. Soliciting advice, teaching, and coaching must be balanced against presenting an image of competence and commitment.

The one-on-one provides an opportunity for the manager and employee to interact on a variety of issues both personal and professional. Both have the opportunity to initiate topics and share success strategies. It is both a teaching and learning event as well as a conversational dialogue, embodying what Gumperz (1982) calls "dialogic properties" – meanings are "negotiated by speaker and hearer and judgements either confirmed or changed by the reactions they evoke" (p. 5). These elements of the one-on-one make it a particularly revealing learning event to study. It provides a window through which to examine the ways that different individuals shape the interaction, how their belief systems about success are revealed through this shaping, and how their opportunities to learn and achieve their goals and those of the organization are enhanced or constrained by the ways they shape this interaction.

Presentation of each case covers three areas:

1. How satisfaction is derived: The personal agenda

This section creates a general portrait of the individual, highlighting from the five possible themes which were most salient. These themes can be seen motivating and shaping the four learning events selected for study. The key themes were also apparent in informal discussions and interactions. I draw upon the data gathered for each individual to illustrate the themes and how they shape each individual's thought, action, learning, development, and job performance.

2. Themes in the one-on-one

This section presents an overview of the kinds of issues the employee is interested in addressing in the one-on-one and the learning style and interactional style the employee displays in the one-on-one.

3. Lessons and uptakes of the lessons in the on-on-one

In each of the one-on-ones there were "lessons," conversational episodes in which the manager taught some piece of cultural or task knowledge to the employee. These episodes looked quite different for each of the pairs. I also found that in most cases there were interesting examples of the employee teaching the manager.

For each of the focal individual's one-on-ones, I look at two "lessons," noting whether the employee had requested coaching, teaching, or information or whether the manager initiated the lesson. I examine the way the conversation develops and how both the employee's and the manager's agendas and learning styles affect the way the lesson evolves. I also look at the uptake of lessons by the employee, noting how the employee responds to the lesson being taught and how this uptake further affects the interaction and the employee's development and success on the job.

Validating the Interpretations

As stated earlier, my primary means of validating the interpretations was triangulation. I asked at least three trusted colleagues in the department to offer their interpretations of the data and to tell me if they agreed with my interpretations. I say "at least three" because for some portions of the ethnography, I have asked more than three people to offer their interpretations. Three individuals from within the training department were involved in triangulating virtually all of the interpretations.

Because I did not want to over-generalize or draw conclusions based on a small sample, the opinions of my colleagues in the Just training department were very important to the validity of this study. I went out of my way to find counter examples and to seek out the opinions of those who have a different point of view than I do. They not only see the world through different eyes, but have had experiences and close working relationships with networks of people in the training department which expanded the scope of the data set.

At least three colleagues outside of Just also offered interpretations of these data and the analysis of them. The time and careful thought all of these

individuals put into thinking about these data and bringing their experiences and insights to bear upon them, has enriched this study significantly.

Conclusion

The design and methods employed in this study are aimed at achieving an understanding of how people work, learn, and develop in one particular workplace. A great deal might be said about the many activities and learning events that occur in this cultural community. This study seeks to reveal the underlying values and beliefs of the culture and of its many different individual members. It seeks to make a theoretical contribution to understanding the ways individuals learn at work, and it also seeks to make a practical contribution to the world of work and to the educational systems that prepare people for the world of work. At its heart, this study seeks to learn something about people at work, so we can make a better work world.

—CHAPTER 3—

CULTURAL BELIEFS AND VALUES UNDERLYING LEARNING AT JUST

Introduction

This chapter answers research question one: At Just Computers, what are the cultural contexts and underlying cultural beliefs and values that are related to learning?

In order to answer this question, the chapter presents a detailed overview of the workplace, focussing on three areas that people in the training department discuss when they come together: (a) work (tasks, technical knowledge, products and processes); (b) the organization (news, information and views of people); (c) the culture (values, beliefs, and folklore).

In the first sweep through the data, which was aimed at revealing all the topics of talk in the workplace, 26 coding categories emerged. These 26 categories could be subsumed under the three broader areas. Talk about work included discussions of the tasks, technical knowledge, products and processes involved in getting the job done. Talk about the organization included talk about people and organizational news and information. Talk about the culture focused on its values, beliefs, and folklore.

In order to keep the detail of the 26 categories while also breaking the data into these larger categories, I developed a numbering system in which the first digit represented each of the "big three" categories under which the unit of data fell, and the second and third digits represented the more specific coding category. For example, the 100 series of numbers stood for talk about work. The number 101 was assigned to all units of data that expressed work ideas. The number 102 was assigned to all units of data that dealt with the topic of planning work. The number 103 was assigned to all units of data that dealt with the work process. The entire list of coding categories is shown in Figure 3-1.

Figure 3-1

Codes Used to Study Cultural Context, Values, and Beliefs

100 Work (Tasks, Technical knowledge, Products, Processes)

- 101. work ideas
- 102. work planning
- 103. work process
- 104. work finances
- 105. work results
- 106. work- getting field input/and giving output (communications)
- 107. work issues
- 108. work-technical topics
- 109. talk about vendors/contractors

200 Organizational News, Information, and Views of people

- 201. views of Just- and info, news, issues
- 202. views of Just Training-news, issues
- 203. views of other departments at Just-issues
- 204. views of field
- 205. views of peers
- 206. views of management
- 207. views of self/own jobs

300 Culture (Values, Beliefs, Folklore)

- 301. folklore
- 302. role models-models of success
- 303. rewards and recognition
- 304. advancement
- 305. troubles and obstacles to getting the job done
- 306. ideas for overcoming obstacles, solving problems, success strategies
- 307. opinions
- 308. learning/teaching
- 309. feedback/evaluation
- 310. requests for help

One of the surprises of the study emerged in coding and categorizing this talk. It became clear that the data I had gathered reflected employees concerns, hopes, ambitions, frustrations, attitudes, beliefs, and opinions about work. For the most part, it did not reflect face-to-face examples of teaching and learning taking place. I had hoped to gather many spontaneous examples of employees engaged in the act of learning, but I did not. In retrospect it is clear that the informal interactions which take place *generally* reflect, not talk about the "hardcore" subject-matter issues, but rather the human factors and social dimensions of work, including how to be successful, how to beat the system, who's doing what, and what everybody thinks about it.

The dynamics change dramatically when examining the talk in team meetings, one-on-ones between team members or between employees and their managers. In such meetings serious business gets discussed. In the "hall-talk" and the informal talk, the cultural and social dimension of work gets discussed. This model of what gets talked about is much like what happens in school. In the classroom, the "hardcore" subject matter dominates the talk. In the hallways and on the playground, the students (and teachers) talk about how to get ahead, who's hot and who's not, and all the human issues that make cultures tick.

The next surprise, which struck me even as I was coding data, was that one category dominated all of the data. This category was Success Strategies, number 306 within the broader Culture category. A great many units of data had a 306 on them. The other category used widely was related, Opinions, number 307. The third most pervasive category was Learning/Teaching, number 308. These categories were so pervasive and so closely related that I came to realize that the story of this culture was told in the data contained in these three folders. Almost all communication on tasks, business, and getting the job done came "wrapped" in a message about a success strategy or a statement of opinion, which was often, but not always, a success strategy as well.

The talk about the three broad topic areas are frequently entwined. Values and beliefs are frequently communicated implicitly as talk about people and work unfolds. Furthermore, employees' talk in each of the areas reveals both

their own personal goals, interests, strategies, and agendas as well as their understanding of the workplace agenda and how their work contributes to it. Much of the talk reflects the meshing of those two agendas as individuals filter the stream of information and activity in the workplace through the lenses of their own belief systems.

For example, in the area of success strategies (306), one employee, when asked how she had managed her project said,

I learn at the last minute. I put things off until the last minute, then I cram because I have so much to do I can't learn ahead of time...It also depends on how skilled you are at working around things. If I can find a way of not having to be an expert in it, why not? Take advantage of it.

In this unit of data, the speaker talks about the process of getting her work done (103), but that description is wrapped in her success strategy (306): try to "work around" learning everything. Try to avoid having to learn everything if you can accomplish your objective without it.

As an example in the area of opinions (307), during a team meeting, team members who had just completed a major project which had been fraught with difficulties, were planning a debriefing in which they would share their experiences with the rest of the department. One team member suggested dramatizing some of the actual situations. The team leader replied, "Well the bottom line always at Just is, what did we learn to move forward? So it's not just a pile of complaints, it's more of suggestions and guidance to everybody out there who didn't live through the hell that we did." In addition to discussing ideas about work (101) and planning a debrief, the team leader has also shared his opinion about what really matters in this workplace (307).

As an example of a data unit in the area of learning and teaching (308), a course developer said, "It's just that there's so much to learn. I mean throughout my last project, there was so much to learn about networking that it seemed like I was constantly just one step ahead of whatever meeting I was in...I would think geez, I don't know enough about that area to talk about it, but it worked out where before the next meeting or something came up

where all of a sudden I had to talk about it, I had learned a little bit about that area."

In looking at these three examples, it is apparent that the lines between success strategies, opinions, and learning and teaching are not hard and fast. These categories are intertwined and interrelated. It did not seem to be valuable to try to separate them. Instead, it seemed more valuable to look for the themes and relationships among them. Figuring out how to deal with all that had to be learned and all that had to be done was the major challenge faced by all the members of this culture. Different individuals and different groups approached the challenge in different ways. While the success strategy of one individual called for working hard to learn all the information about networking, just in the nick of time, for others the success strategy employed involved learning to find alternative ways to meet objectives while finessing the need to learn everything.

The analysis is based on the principle that learning is socially and culturally based: people learn to fulfill socially valued goals and purposes. Learning is also an interactive process in which new skills and knowledge grow out of the social interactions through which individuals come to understand the purposes their work will serve in a particular cultural context. A description of the purposes and processes of work and the structure and dynamics of the organization precede the discussion of the way that cultural values affect learning. The sections on work and the organization provide descriptions of the purposes and context. If "all the world's a stage," these sections are the descriptions of that stage, the scenery, the other players, the plot, the mood, the tempo, the back stage politics, the front stage performances, the audience, and the *raison d'être* for learning.

The results which follow are presented in three stages, reflecting the three broad categories and their subcategories uncovered in the first sweep through the data:

Work

1. How work transpires
2. The course development cycle

3. The process: activities that employees engage in to get the work done
4. The overt curriculum: what employees need to know and do
5. Rewards and recognition

Organization

1. Achieving affiliation at different levels of the organization
2. The corporate goals
3. The training department goals
4. The organizational groups: the "worker bees," "peons," or "pond scum;"
5. Specialists views of themselves and their jobs
6. Management
7. Reviews: the report card of the workplace
6. Informal structure of the training department

Culture

1. Status in this culture
2. Cultural climate
3. Cultural affiliation
4. Cultural values - the unofficial social and cultural division within the training department.

The interviews, memos, and informal talk gathered and coded in the folders did not contain an in-depth, comprehensive portrait of work (the tasks, technical knowledge, products, and processes) or the organization. As noted earlier, this surprise finding reflected the fact that informal talk did not transmit a great deal of this information. Thus for the analysis of the work and the organization, I draw heavily on other data sources. These other sources, described earlier, include formal data gathered from July, 1989 to February, 1990 supplemented by three years of informal data collection including memos, documents, a personal journal, and observations and participation in hundreds of meetings and interactions.

Because data collection and early analysis revealed that the story of the training department was told primarily in the culture area, the sections on work and organization are briefer and serve as background to the section on the culture. The informal talk does reflect underlying cultural values and

beliefs. The interpretations presented on the culture draw primarily on the folders of coded and categorized data. The headings for the sub-areas were chosen to reflect the salient themes that emerged across the data within each area.

Results

Work

How Work Transpires

Work in this department takes place when a team is assigned to a project. In the training department these assignments usually involve creating a course on topics such as: how to construct computer networks, how to sell computer systems to large businesses, or how to use word processing software. At the outset of the project, a team leader is usually assigned. One of the first tasks of the team leader is to develop a timeline for the life of the project. Typical projects might take four months, but they range from two months to a year. The deadline is almost always assigned along with the project, so the leader's job is to determine how the work will map onto the timeline. This involves coordinating many strands of work performed by many different people, from writers to evaluators to production people.

The sequence of events, interactions, and work that takes place and the human drama that unfolds in completing the project might be viewed as chapters in the work life of each individual on the team. Each project develops a coherence and story of its own once the team members assume their roles and engage in the process of achieving the goal. After the project is over, the team members sometimes refer back to it with reminiscences and folklore; often the relationships that evolve during the process of working together remain as friendships long after the project is complete. Sometimes tensions and disagreements linger as animosities long after the project is complete. People's investment in their work often results in personalizing of the results and relationships.

Within each project or chapter, episodes or events take place. These occur in achieving the sub-tasks and milestones that take place in the course of getting

the job done. There are many routine episodes. For example, during development, each course is tested at least twice with an audience. These trial runs are known as an Alpha and Beta test, and they are the events that provide the course developers and their teams with feedback on whether or not the course is on target, based upon the opinions of representatives of the intended audience. Unexpected and out of the ordinary occurrences invariably occur in the life of each project as well. For example, the new product under development, about which the course is being developed, may change and have a new set of features. This means massive rewriting of course materials without a change in deadline. At this point the pace of work must accelerate.

Tasks, of course, are all of the activities which are performed in service of reaching the overall goal. Reaching each of the project milestones requires the performance of numerous tasks ranging from phone calls to getting feedback on proposed ideas to writing memos to entering invoices on a spreadsheet. Organizing and prioritizing these tasks is a task as well. Finding efficient ways and short cuts for dealing with tasks is also frequently required if the work is to get done in the time allotted.

Course Development Cycle

The work of creating courses involves following a certain series of activities which may be viewed as the course development cycle. This cycle is something that employees come to know through the process of cultural transmission. Until 1989 Just's course development process had never been documented. At that time, an attempt was made to create guidelines for the process. Many staff members resisted what was perceived as an attempt to limit individuality and creativity in course development. The guidelines were finally created after much resistance and criticism. They were rarely used.

While some projects may deviate from the cycle described below, it is the most frequently followed path in creating a training course.

1. The need for a training product is identified. One of the organizations in the company such as the new products division or the

marketing department determines that there is a need for a training course and determines when it is needed. In collaboration with a representative, usually a manager of the training department, the general specifications and budget are agreed upon.

2. A team is assigned to the project. A manager in the training department assigns the new course to a team. The due date, budget, and other specifications are established. The team members are also told who their subject matter expert will be, usually someone from the department funding the course development. Usually subject-matter experts (SMEs) are expected to provide the technical expertise or the explanations about the marketplace and the marketing strategies. These experts frequently are so busy that, in prioritizing the demands on their time, they have little or no time to spend with course developers.

3. Key issues are identified and resolved--data collection, data analysis. The course developer/team leader does some research with the intended audience. What do they believe they need to learn about the subject-matter? How would they like to learn about it? In a classroom setting with an instructor? From computer-based training? By reading a manual? How much technical depth do they need in order to do their jobs effectively? Questions like these are answered in order to design an appropriate course or other learning activity. The budget has been determined earlier, so the course must be designed to stay within that budget.

4. Deliverables are created. The team works together to create the agreed upon deliverable. Numerous revisions take place based upon the Alpha and Beta tests and the input of various stakeholders.

5. Deliverables are rolled out. The deliverable is released to the field trainers who are responsible for teaching the courses and implementing all of the training activities across the country.

6. Deliverables are revised. Based upon feedback, product updates and other factors, the training materials may be revised. If this happens, steps 3-5 may be repeated at this point.

7. Deliverables are rolled out again.

The Process: Activities that Employees Engage in to Get the Work Done

Throughout the process of performing their jobs employees engage in a variety of interactive and solitary activities. During some of these activities they are learning what they need to know to accomplish their goals; in others they are communicating or performing job tasks. The activities performed during the process of working are subsumed in the following activities.

Interactive Events: Meetings

1. One-on-one with manager
2. One-on-one with team member
3. One-on-one with other
4. Team meetings
5. Other types of meetings

Solitary Events: Working alone

1. Reading
2. Writing
3. Thinking

The Overt Curriculum: What Employees Need to Know and Do

Doing work in this culture involves knowledge and skill in numerous domains. These items of workplace curriculum were generated as a result of the forth sweep through the data which was aimed at revealing the items of the workplace curriculum. While the following list may not be exhaustive, and not all employees need to be knowledgeable in all of these areas, most employees need to know about and be skillful in most, if not all, of the areas listed.

1. **Knowledge about the marketplace.** Employees need to understand who the customers are, what they do, and how Just's products can help them. They also need to understand "the big picture" in terms of Just's marketing strategy and the trends in the computer industry.

2. **Knowledge about the technology.** Employees need at least baseline knowledge of computers and how to use them to do their work. They also need additional knowledge, as appropriate, for their particular job assignments. For example, employees developing sales training need to understand how different customers would best use Just's products, while

those developing training providing technical information about the products would need to understand a great deal about how computers function and connect with one another.

3. Knowledge about instructional design/course development. Course developers need to be able to design and develop courses which effectively teach class participants the subject matter they need to do their jobs.

Achieving this goal requires an understanding of principles of teaching and learning, how to select and use various media to achieve training objectives, and evaluation and assessment.

4. Knowledge about the audience for the training ("the field"). The field consists of both the trainers who teach the classes and the students in those classes. They are the customers for whom the training materials are being developed. Course developers need to understand and satisfy their needs. This is frequently a great challenge since there are limited opportunities for course developers to spend time with these customers who are spread across the country and around the world.

5. Business skills including knowledge about the processes in the department and the ability to move projects through the system. This is a broad area which includes a wide variety of skills, knowledge, and the ability to use them effectively. Business skills needed in this culture include: communication skills, project, time, people, and financial management skills.

Rewards and Recognition

Employees are recognized and appreciated for their efforts through public recognition at staff and department meetings. Department meetings involve all the members of the training department, occur approximately once per quarter, and have a recognition segment in which employees who have just completed projects are called to the stage by the department director. He tells the rest of the organization about the contribution these employees have made. In addition, they are sometimes given plaques, trophies, and/or monetary bonuses for their efforts. After important projects are rolled out, the team members often hold parties and celebrations at company expense. They have given a lot to help the company achieve its goals, and the company recognizes and rewards them for their contribution. This merging of the company's success with individuals' achievements is a key element in this culture. It is played out every day in large and small ways. It says as

much about the corporate culture and its values as it does about the individuals who chose to work in this environment and thrive in it.

Organization

Achieving Affiliation at Different Levels of the Organization

In looking at the culture of the training department, it is clear that individuals achieve affiliation with the culture at several, sometimes overlapping, levels. There is membership at the corporate level—represented by affiliation with Just Computers. There is membership at the department level—represented by affiliation with the training department. Within the training department, there is a formal organizational structure which divides the department into organizational groups. There is also membership at this group level.

Members from several different groups come together to work on projects. There is a high degree of affiliation with these project teams, since almost all work is done by them. These cross-functional teams bring together individuals with different skill sets. One's value to that team comes from the specialized job skills one brings, such as production expertise, course development expertise, administrative skills, etc. One's value to the company and the department comes from the work one does in contributing to the project team.

There is also membership in informal groups composed of people who talk, teach, support, and help each other because they share values, have formed alliances or are friends. The sections which follow discuss the characteristics and significance of membership in each of these groups.

The Corporate Goals

Employees are interested in understanding the corporate goals for two primary reasons:

1. In taking a job, people have chosen to define themselves, at least in part, through the work they do for their employer. They have also joined a workplace culture. Employees want to understand and feel allied with the

goals and values because understanding and believing in the mission of the company is necessary for cultural affiliation. At the most general level, the company's goals are growth and profitability. These are what enable it to exist. There would be no jobs without the achievement of those goals. Therefore, very few people appear to disagree with those goals, and there is relatively little discussion about them.

2. The second factor that motivates employees to understand the larger corporate goals and strategies is that such an understanding is a necessary prerequisite to contributing in one's particular area. Individuals in training can add value to the corporation through their contribution here. The mission of the training department is determined by deciding how it can best contribute to the overarching corporate goals. Individuals can make a difference, albeit a small difference, to the corporation through their efforts in creating training.

Evaluating corporate goals. Embracing, or to use the cultural term, "buying-in" to these goals, also implies embracing the values that are necessary to achieve them. Although most employees buy-in to the broad corporate goals of growth and profitability, the various strategies that the executives choose to achieve those goals do occasionally become a topic of interest. Discussion of the corporate goals and strategies tends to become a "hot topic," primarily at times when the general corporate goals are undergoing a re-evaluation, such as following a period when profits have been less than hoped for and the corporate belt must be tightened, or following the introduction of new products that affect the entire business of the corporation. At these times, talk among employees is filled with expressions of their hopes and fears for the company. They freely exchange and debate their various opinions about what could and should be done and what the future will hold. They evaluate why successes or failures occurred and who and what is responsible.

At such times, when events herald turning points, employees engage in increased discussions about how Just is today as opposed to how it was in its early days. Even during periods of normal business operations, this topic is one which gets discussed. The early history of Just is legendary among

employees. Those who have been with Just for many years seem to feel nostalgia for what is generally viewed as its former freewheeling, go-for-it, break-the-rules, brash and extravagant days. Employees frequently debate whether things now are as good as they used to be. There is a sense that Just is growing up and that things were better, purer, more idealistic, more inspired, and more fun when the company was young.

However, most of the time, from the point of view of employees on the lower rungs of the ladder, the corporation appears to be sailing along rather smoothly. During these times, there is little discussion of corporate issues, and there is general buy-in to the corporate goals which are determined by the top executives. The fact is that there is virtually no opportunity for people on the lower rungs of the ladder to influence the major corporate decisions and policies. While the company expends quite a bit of energy communicating, explaining the rationale, and "selling," its decisions to all the employees, they are not included in the decision-making process. Key decisions and strategies are made at the highest levels. The corporation is not a democracy.

In the eyes of most employees, Just is an exciting, innovative, and caring workplace. This belief is held both internally, by employees, and externally, from the level of the local community up to the national level, through numerous public relations activities. Both employees and non-employees think of Just as one of the best workplaces in America. And it certainly appears to be so. The working conditions, salaries, and benefits are excellent. The products are exciting, innovative, and enthusiastically received by customers. The employees are young, ambitious, and frequently described by upper management as "the best and the brightest." For the most part, there is a feeling of camaraderie among employees throughout the corporation. The camaraderie is based upon the belief that together this community of hard-working, intelligent, dedicated, and well-rewarded people will make a difference in the world, both through the exciting computer products they are involved in creating and in setting an example to the rest of the world about the way business can be in the 21st century.

The Training Department's Goals

The company's success hinges largely on sales people being able to sell Just products. In order to sell effectively, they must know a great deal about the products themselves: what benefits these products bring to the different types of customers who might be interested in buying them, and how these computer products can connect and be compatible with other computer products that the customer may have already invested in. Once customers have purchased Just computers, they need to learn how to use them to perform day-to-day tasks. The training department creates training for the sales people and customers on an array of products. New products are released several times a year, technologies become more powerful and complex, and Just's products connect and interface with an ever increasing array of products and technologies from other companies. The Just training department is responsible for keeping the sales and support people and Just's customers or "end-users" educated on all of these products and technologies.

In addition to developing courses for these various audiences and purposes, training must adapt to different corporate contingencies. For example, at times, when sales and profits are down and the corporation goes into a belt-tightening mode, the focus may be on creating training that is as cost effective as possible. At times when the Just classrooms and trainers cannot accommodate the number of trainees who want to take classes, the goal may be to create training that is self-paced and can be done outside of classrooms. Individuals who work in the training department use their knowledge, experience, and ingenuity to solve the problems in their area and thereby contribute to the company's success.

Evaluating the department goals. Individuals spend more time discussing and communicating about department goals than corporate goals. Opportunity to influence exists to some extent at the department level. Since their jobs will be defined in large measure by the department goals and strategies, members of the training department are interested in helping to shape these. They pay a personal price if the department is not successful and the goals and strategies do not meet the needs of its constituency. Employees have a vested interest in being part of a department that is on a successful mission.

However, many employees in the training department say that they believe the director of the training department generally sets the direction for the department based upon his vision and has not made the formulation of the department's goals and strategies a consensus proposition. Like the corporation, the department is not a democracy.

So, while employees have expressed their interest and willingness to share in the formulation of these goals, their influence is limited. In fact, on several occasions the director has shared his vision and strategy with other departments or with the field organization without informing members of the training department what it was. Therefore, a considerable amount of talk is focused on the questions: Do we know the department's goals and strategies? Do we 'buy-in' to them? How can we influence the department's direction? What tactics will we employ to achieve these broad goals? What can we do that's innovative, creative, and exciting? How can we be successful? How can we solve the complex problems that we face? Do we have the skills, time, leadership, and resources to solve these problems? The department goals and strategies have evoked both hope and anxiety.

Nevertheless, many employees respect the director, Wallace Walker, and feel that his vision is one in which they believe. As one employee put it, "he's light-years ahead of everybody else in the industry." Most employees agree that during the two years that Walker has served as director of the department, he has been highly effective at communicating and selling his vision to the top executives and to the field. He has brought credibility and respect to the training department. On the other hand, many employees believe that, while Walker's vision is one they agree with and would like to see realized, he has not articulated how it can be accomplished. As one employee put it, "He's not a hands-on kinda guy. He leaves it to other people to figure out how we're gonna do all this stuff." As Jean O'Donnell, one of the course developers commented to Walker after he had presented his training strategy to her group, "It sounds great, but I think that there's fear on the peon level about how to get there." The rest of the roomful of "peons" agreed.

The Organizational Groups: The "Worker Bees," "Peons," or "Pond Scum"

The training department is subdivided into various groups organized in a traditional hierarchical structure. Membership in a group within the training department provides most employees with their strongest ongoing sense of identity. In other words, Sales Training course developers have a strong affiliation with that job category; production coordinators identify with that group; Technical Training course developers identify with their group and so on. In some cases, the groups are defined by their functions. For example all of the production coordinators are in one group, all of the implementation specialists are in one group; all of the people involved with evaluation are in one group. Since there are so many course developers, and they are involved in developing training materials in different areas, there are five different groups consisting primarily of course developers. There are some job functions which are handled by only one or two employees, so they are grouped with other small or single person functions which are related. For example, the people involved in finance are in a group with the person responsible for inventory management and the people responsible for field communications. These operational functions are grouped together.

Course Developers. The product of the training department is training, and consequently its value to the corporation rests on its ability to develop and deliver courses and other instructional materials that teach people in the field how to use, sell, or support computers. The training department's products take the form of course materials in either traditional, print-based medium, or in more innovative non-traditional forms such as interactive video and other types of computer-based training. Because producing these deliverables is the mission of the training department, the course developers, the people with direct responsibility for creating those deliverables, are functionally at the heart of the group. They serve as team leaders on project teams which include other specialists. In a very large project, more than one course developer may serve on the team. In this case, the more senior or more "stellar" course developer would usually be designated the project leader.

Because so many other time-consuming and specialized tasks are necessary to "get a course out the door," a variety of other specialists work on the project teams. Descriptions of these other specialists follows.

Production Coordinators. The production coordinators are responsible for taking the finished master of a course and having it produced in mass quantities. Right from the beginning of the project they serve on the team to advise the team about production issues. Their function involves insuring that each and every component of the course is produced with excellent quality and as cost-effectively as possible. The kinds of decisions they help the team make range from what size and type of binders the course materials should be packaged in, to what the artwork on the cover will look like, to how the tabs on the binders should be designed, to the design of the labels on the floppy disks, to the type of paper and printing process, to what color work will be done, to the specifications of the boxes in which the materials will be shipped.

Implementation Specialists. Understanding the issues in the field is critical to the success of a course. As a somewhat dramatic example, in one project, the training department invested heavily in developing a state of the art interactive video course, only to find that many field locations did not have the costly equipment necessary to deliver the course. Even though each field training center had been given funding to purchase the needed equipment, corporate headquarters didn't realize that the field offices had decided to use that funding for projects they deemed of higher priority.

Another example of the importance of understanding field issues involved an incident in which a team of course developers worked very hard to plan a series of workshops to teach topics in which the field trainers had expressed strong interest. The workshops were to be delivered by a team of presenters from other companies who were subject-matter experts on these important and complex topics. These experts had committed to going to Just training centers throughout the country to teach the workshops. The training department enthusiastically announced the plan two months in advance. The field offices were furious because they book their training rooms three

months in advance and many of them could not accommodate what they viewed as "last minute" workshops.

While perhaps somewhat less dramatic, situations like those described above, happen regularly. The field has been known to refer to those who work at the corporate offices as "corporate pukes," indicating their frustration with how "out of touch they are." There is tension between the field and corporate. In order to ameliorate problems which arise from the difficulties of having a corporate office which needs to better understand the nature of life out in the field, the training department created a job called implementation specialist. Four employees form a team whose purpose is to insure that plans for implementing each course synchronize with the way the field does business. They are responsible for insuring that needed equipment is in place, that timelines are appropriate, that course requirements for field employees are communicated, and a host of other issues.

Testing and Evaluation. Each course needs to have a test associated with it and attendees cannot get course credit unless they pass the test. This is a relatively new requirement, in effect for about one year. It is very controversial and implementing it has been described as "a nightmare." One of the specialists responsible for testing frequently comments about the "tire tracks" across her body from the angry field managers who have had a difficult and frustrating time trying to implement the new testing policies, and who, in many cases, don't agree with them.

Other Specialists. As already mentioned, numerous other specialists play roles in "getting a course out the door." There are specialists who handle the finances. Training has a multi-million dollar budget and hundreds of invoices, expense reports, and check requests must be processed each month. Budgets must be forecast, accrued, and actuals reported each month. There is a large warehouse filled with inventory of training course components. People in the field order supplies electronically as needed, and the inventory specialist fulfills these requests. She also monitors inventory levels and when they get low, she arranges for course materials to be reproduced. A field communication specialist keeps track of all the trainers nationwide, what field offices they're associated with, and all of the hardware and software that

each training center has. She regularly communicates to the field managers all of the key activities of the training department which are relevant to them.

The Support Functions. There are two types of jobs which provide support to the other functions: the administrative assistants (known as an AA) and the training coordinator (known as a TC). Just does not have secretaries because most employees do their own typing (word processing) and filing, the traditional mainstays of the secretarial function. The types of administrative support that employees need consists of an array of tasks frequently calling for creativity and independent problem solving. Typical tasks range from preparing the agendas and handouts for staff meetings to arranging for equipment and software for employees to answering electronic mail memos to making travel arrangements for business trips and keeping calendars for managers. Since the title secretary, for some people, has connotations of typing, filing, and a dead-end career path, Just has created the title administrative assistant to reflect the job of people who provide administrative support to members of an organizational group.

While administrative assistants provide support to the organizational groups, training coordinators provide support to project teams. Training coordinators can be viewed as one notch higher on the corporate ladder. They are paid higher salaries, and many administrative assistants aspire to develop their skills and experience and be promoted to training coordinator jobs. Many training coordinators aspire to develop their skills and experience and be promoted into course developer or implementation specialist jobs. The training coordinators are members of the teams which develop training courses and provide a variety of administrative support services to their teams, from taking and publishing the minutes at team meetings to planning the logistics of "Alpha" and "Beta" tests to handling communications with the field and other corporate departments.

Specialists Views of Themselves and Their Jobs

Each of the specialists described above is formally known as an individual contributor. This term indicates that these employees produce work and make a contribution through their own efforts. This contrasts with

managers, who "get work done through others." In practice the distinction is not as clear as it may seem because the course developers usually do not write the courses for which they are responsible. They hire outside vendors, small training companies or freelance writers, to write and frequently design the courses. The course developers sometimes design the courses and supervise the work of these vendors. They are managers of vendors.

Nevertheless, a tension exists between managers and individual contributors. Individual contributors often feel like management makes decisions which affect their lives and about which they have little or no say. They sometimes feel that if management really understood what it's like "in the trenches," they would not make what are often viewed as unrealistic decisions. At such times, when individual contributors believe management has made decisions which reflect their lack of understanding of reality in the trenches, they make comments like, "we're just the pond scum; no one asks us our opinion" or "that'll never work, but they don't bother to ask the peons."

These feelings of powerlessness on the part of individual contributors are not generally the prevailing attitudes, but such attitudes surface primarily at times when controversial changes have been made by management. Most of the time individual contributors are too busy and involved with their own tasks and projects to invest energy in analyzing their relationship to management. Furthermore, much of the time management and individual contributors are in accord about the work that needs to be accomplished, and many managers give the individual contributors responsibility and autonomy in how they go about it. As one course developer said, "I'm happy as long as my manager stays out of my way. That's why I'd rather have a weak manager than a strong one. With a weak one, he's less likely to interfere with my agenda. A strong one's always trying to push their own agenda."

In addition, individual contributors at Just can have a great deal of influence, autonomy, and the opportunity to see their ideas become reality. During the past year, two course development teams proposed innovative and technically sophisticated training projects. After successfully selling their ideas to upper management, they each received major funding to develop

their ideas. During the development process, the teams had a great deal of autonomy and responsibility for seeing their visions brought to fruition. Since no one on the teams, and probably no one in the training industry had attempted projects of this scope and technical complexity before, the teams faced a great many challenges along the way. The process was fraught with difficulties and learning opportunities. Both projects concluded successfully, and the individual contributors involved received the benefits of the learning experience as well as recognition and respect from their colleagues in the department and their customers in the field. They also all felt inner satisfaction at what they had accomplished.

Management

Although organizationally managers have more authority, more status, and receive higher salaries than individual contributors, they too have a set of challenges and frustrations. While supervising the work of others may seem easier than doing it oneself, managers sometimes wish that they could get work done through their own efforts.

As a manager, one's own reputation and effectiveness depends on the work of the people in one's group. Usually, individual contributors who are high achievers, believers in the corporate agenda, and generally considered "stellar," are promoted to management positions. Once in those positions, their "stellar" reputations hinge, not only on their own performance, but on their ability to get the people in their groups to perform according to the corporate agenda: be outstanding, fast, and productive. Not all individual contributors embrace this corporate agenda with the same ability or intensity as the manager and the corporation would like them to. Furthermore, the priorities that have meaning for the individual contributor may differ from those of the manager. Although this study looks primarily at individual contributors rather than managers, understanding the managerial point of view enables us to understand the tensions in the relationship.

An important part of the management function takes place in interactions between managers and the individual contributors who report to them. These regularly scheduled, formalized meetings are known as one-on-ones, and they are key cultural events in the training department, at Just

Computers, and, in fact, in most large companies. One-on-ones usually last for about an hour and occur either once a week or once every other week depending upon the manager's style, the needs of the reporting individual, and the number of people managed. A manager of 15 people would be spending at least 15 hours per week with one-on-ones if they were held weekly. One-on-ones occur all the way up the hierarchy of the corporation. Managers report to those at higher levels, and have one-on-ones with the immediate superior to whom they report.

In these interactions, cultural values are transmitted, projects are assigned, and the corporate agenda is communicated. In addition, employees present themselves to the key person who is responsible for formally evaluating them, and they receive feedback on their performance. The one-on-one is also a potential learning opportunity. Organizationally, it would seem that the manager is the logical person to teach, coach, and advise the employee in areas in which that employee needs to learn and develop. Sometimes this happens; often it does not.

A social barrier also exists between each level of management. In this study, I have focussed on the social barrier between first level managers and individual contributors. I have not examined relationships further up the hierarchy.

Catherine, a very effective and well-respected manager, described this social barrier one day when she discussed what she thought about in making the decision to accept a promotion and become a manager. She said, "All that talk by the water cooler, and all that chit chat and personal stuff, and knowing how people feel about things, I chose to give that up when I became a manager. I thought about that a lot, because I knew I'd miss that. People aren't open to you in the same way, once you're a manager."

One of the reasons that "people aren't open to you in the same way," is that a manager represents the corporate agenda. The job involves supervising others to insure that the work they do fits the corporate agenda. Whereas individual contributors may gripe about a peer who isn't pulling his or her weight, "worker bees" generally feel a sense of camaraderie, partly because

they share a set of common pressures and problems. They sometimes believe that those problems arise from the decisions and values of management. The unreasonable timelines, the ever-changing priorities, projects, and processes all seem to be mandates that "come down" from management. The "peons" feel that they are paying the price for the decisions of management, and they have the luxury of saying so. Although the immediate managers to whom they report may have had nothing to do with such decisions and may very well be in sympathy with the frustrations of the worker bees, as managers they are responsible for communicating, endorsing, and selling those ideas to their people and ensuring that they are acted upon appropriately.

Reviews: The Report Card of the Workplace

Another reason why individual contributors are less than completely open with their managers is that their managers write their reviews. The review is very much like a report card, although it is written in narrative form and has nothing equivalent to a letter grade per se. Every six months, each employee receives a review or performance evaluation. Many managers ask the employee to provide a list of people with whom they have worked closely over the previous six months and whose input they would like to have included in the review. The manager then asks those colleagues to provide review input. The manager synthesizes the opinions of colleagues with his or her own assessment of the employee's performance.

Employee's raises are determined by these reviews. The reviews become part of a permanent personnel file, so that the future career of employees at Just is influenced, at least to some extent, by the contents of the reviews they receive. Most employees have a strong vested interest in receiving a good review and therefore want to present themselves to their managers in as positive a light as possible. For many employees, this makes them less open. They are reluctant to risk asking stupid questions, admit they've made a mistake, reveal that they don't know something they think they should, or share their insecurities and worries about their ability to "be stellar" with the person who may interpret such honesty as incompetence. As Tom Winter, an employee interviewed in an earlier study of this workplace (Richardson, 1987) said,

Well, you don't want to go to a manager and say, "I don't know how to do this," because he may feel, "hey, you can't do the job." So there is this thing to protect our own life and our own career. So we'll go to our peers which are non-threatening. Managers are threatening, I think.

Informal Structure of the Training Department

The formal organizational chart reflects functional divisions in the department and the hierarchy and reporting structure of the organization. But another, more hidden and informal structure exists as well. The goals of the department, the goals and interests of individual employees, the relationships that develop between individuals, and the work that is done create an informal pattern of hierarchies, relationships, and networks. It also creates positions for informal leaders, gurus, and subversives.

The informal structures emerge in exploring the ways that different individuals with differing personal agendas seek to define their jobs. Individuals are strongly motivated to find personal fulfillment by developing their preferred skills and interests. They want to contribute to the corporate agenda in a way that allows them to find the maximum personal satisfaction. Individuals with common interests and values tend to join together and create informal groups. These will be explored in greater depth in the next section.

Culture

The culture in the training department is rich and complex. Its structure and values powerfully affect what members of the culture learn and how they develop. In order to describe and illuminate the culture, I made a sweep through all the data and arrived at four traditional categories which are frequently used in ethnographies. These categories effectively capture the key elements of this workplace culture: status in this culture, cultural climate, cultural affiliation, and cultural values.

Status in this Culture

In this workplace culture, status comes primarily from being "stellar" at achieving the corporate agenda. The qualities that are needed to achieve the corporate agenda are qualities that are highly valued by members of the training department: the ability to be very effective in getting projects completed, the ability to learn quickly with a minimum of hand-holding, the ability to get the commitment of a number of other people so that they spend their time and efforts on your project, the ability to understand the needs of the field and to effectively meet those needs and win their approval.

The goals of the company and the department serve as the common agenda for most employees. The extent to which employees have adopted these goals as their own is evident in the degree to which they exert peer pressure on one another to achieve these goals and are critical of those who are less effective at doing so. The cultural grapevine is filled with stories and opinions about the competence of various individuals. For example, one employee told me,

There certainly are people who have the confidence that they can do something, but when they don't have the skill behind it, there's a cost. Cause I've worked with people like that too. I think Roger Harkness sometimes. George Mason is a prime example of that. Mr. Talk Shit.

Since most work in the training department is done on teams, the entire team bears the "cost" of the employee who doesn't perform well. In the following conversation two employees talked about being assigned to join a team that was in the middle of a crisis,

Courtney: I had such mixed feelings, because I didn't want to be associated with a losing team either...it was a horrible fiasco, and it's not appropriate to stand up there and say, "I wasn't part of it, I didn't work on this, I'm just coming in here to try and salvage a bad situation." You can't do that. So you have to have some of the mud splatter on you too and pretend you were part of the team that made a terrible mistake. Who wants to join that kind of a team?

Diane: And that's one of the feelings that I have...cause I have the same feeling about being on the peripherals team right now. We have a course that I can't buy into and my name is associated with it...whether I had anything to do with it or not. And I'm

not really crazy about that...But then we try to turn that into positive energy and say, "But wait a minute. We're on this, we've got to find a way to work it out." But...I find myself, in my head, sometimes trying to say, "Well, how can I get this thing to slide off me?" Which is a natural protective reaction.

Cultural Climate

Although employees at all levels of the corporation talk often about keeping the old Just values alive, the company has changed. By 1988, Just has, as one executive recently put it, "reached its adolescence." During the past five years, Just has continued its tremendous growth and has achieved its long sought for acceptance in the business marketplace. Just, now a Fortune 500 company, competes in one of the toughest marketplaces against numerous corporate giants. Many employees have been hired, not for their computer expertise, but for their abilities in sales, marketing, training, advertising, finance, or human resources. Today there seem to be as many business suits as jeans. Many employees hired in the recent past come from more traditional corporations and did not grow up professionally in the Just culture. While the employee population is still young and hard working, it is not as young as it once was. As new, more traditional employees have joined the ranks, as some of the more free-wheeling, entrepreneurial old-timers leave the company, and as long-time Just employees get older and have families, employees are less willing to work 90 hours a week and love it. Employees now talk about keeping their work lives in perspective, and having greater balance in their lives.

The effective job performance of these individuals enables this large corporation to create, market, sell, and support computer products, to meet its business goals, and to operate at a profit. But the effective job performance of individuals also enables each of them to achieve, not only paychecks and promotions, but also a personal sense of satisfaction. The fact that individuals have tied their own personal goals and sense of satisfaction to success at work is so important to the success of the corporation, that Just has made the development and fulfillment of individuals one of its own top priorities.

The company also recognizes that its success, to a large degree, hinges upon creating a strong, positive culture and a social climate in which each individual feels he or she belongs, plays an important role, and can grow and develop. All new employees, on their first day of work at Just attend an orientation program, a standard half day presentation and introduction to the company conducted by the Human Resources group. This orientation introduces employees to Just's values. Two of the values which capture particularly well the spirit of this culture are:

Individual Achievement: This value emphasizes the importance of outstanding levels of individual commitment and performance. Through the contributions of individuals, Just can achieve its corporate objectives. Each individual can and must make a difference--Just's success depends upon it.

Teamwork: Employees need to work together for Just's success. One person working alone cannot succeed. We share ideas and work together to create the best products and the best quality of life in the workplace. Our collaboration, supportiveness, and enthusiasm will enable us to prosper and succeed.

While individuals enter the workplace with a personal history and a corresponding set of notions about what it takes to succeed at work, the notions they have coming in are affected and modified by the culture of the workplace and their experiences in it. Learning in the workplace involves the interactive process by which these personal notions grow and develop through the individual's interactions with others in the workplace. However, the workplace itself, the corporate culture, evolves and changes too, both in response to the individuals who comprise it and shape it as well as in response to the social, economic, and political forces outside it.

In The Change Masters, (1983) Kanter's study of innovation and entrepreneurship in American corporations, she describes the kinds of corporations that will be needed to face the challenges of today and the foreseeable future. She might have been describing Just in that her description is one that expresses the cultural climate that Just tries to create.

We need to create conditions, even inside large organizations, that make it possible for individuals to get the power to experiment, to create, to develop, to test – to innovate. Whereas short-term productivity can be affected by purely mechanical systems, innovation requires intellectual effort. And that, in turn, means *people*. On all fronts. In the finance department, the purchasing department, and the secretarial pool as well as the R&D group. People at all levels, including ordinary people at the grass roots and middle managers at the heads of departments, can contribute to solving organizational problems, to inventing new methods or pieces of strategies.

These 'corporate entrepreneurs' can help their organizations to experiment on uncharted territories and to move beyond what is known into the realm of innovation – if the power to do this is available, and if the organization knows how to take advantage of their enterprise (Kanter, 1983, p. 23).

Just's corporate philosophy seeks to empower individuals to take responsibility and to get the job done as innovatively as possible. To this end it has eliminated many levels of the traditional corporate hierarchy. It gives individuals a great deal of responsibility and autonomy in getting the job done. Because so much work is done by teams of peers, the climate the company seeks to achieve is one of consensus and teamwork rather than autocratic decision-making.

Yet still there is a hierarchy, albeit flatter than most corporations. And decisions are still frequently made by the top executives and pushed down through the ranks. However, when this is done, executives usually engage in communications designed to explain the rationale for such decisions in order to gain the understanding and support of individuals throughout the company. One of the mechanisms for achieving this employee "buy-in" is the company-wide communications meeting. During this meeting, all the employees gather together to listen to the executives share their vision of where the company is going and their strategies for achieving that vision in the face of competition, finite resources, and other challenges. During these meetings, employees are invited to ask questions. Not only do many accept the invitation, but they frequently ask questions which challenge the

executives' information sources, decision-making process, and decisions. Employees frequently continue such debates about the corporate direction and strategies among themselves as well.

Achieving the overarching corporate goals calls for employees below the executive level to develop the products and programs that contribute to the realization of those goals. Employees at all levels are frequently asked to contribute their ideas, and then assigned to a team which is given responsibility for "making it happen." Throughout this process, teamwork, discussion and debate are an important part of getting the work done. This atmosphere frequently creates high motivation and an esprit de corps among employees. Each feels that he or she has ownership and responsibility for one piece of the whole; his or her contributions do play a role in helping the company achieve success. This context also motivates and fosters the intellectual development of individuals. In working collaboratively to achieve the objectives and solve the problems of the corporation, in their efforts to achieve successful innovation, individuals arrive at novel and creative solutions. Employees' intellectual achievements become the corporation's business achievements.

This is what happens when everything is working at its best. When the context described above and the talents, abilities and motivations of individuals come together and problems are solved collaboratively, a tremendously powerful learning field is created and a great deal of high quality, productive work results. But there is also the opportunity for less than ideal conditions and individuals who may not bring to the contexts the requisite skills and motivations.

The anxiety of charting new ground: "I don't know how to do my job." Few individuals have enough background, talent, interest, and resources to bootstrap themselves in all the domains required to perform a particular job: knowledge about the marketplace, the technology, instructional design, the audience, and business skills. Most employees are stronger in one area than another. They tend also to enjoy that area the most and define their personal agenda around success in that area. Sean Miller, a course developer, describes how he and his team spent almost a year developing a state of the art training

program. What matters to Sean is having a chance to "push the envelope" of technology while stretching to learn whatever is needed to achieve his technical vision and create a great training product. For Sean, this work provided an excellent opportunity for meshing his personal agenda with that of the workplace. For him, his work had become play. He did it, not because he had to, but because he wanted to,

We all kind of bitched and moaned about the Networking projects and curriculum, but it was great. It was great; it was fabulous. I mean every one of us was cranking and peaked out throughout that whole thing. Every once in a while we would pass each other and update each other on what was going on, but there were so many unknowns; we were charting new ground, pushing the envelope in some areas that we were working on. That's the environment we like to play [in].

Although many employees find their jobs exciting and rewarding, they are also fraught with tension and anxiety. Employees are faced with situations in which "there are so many unknowns; we were [are] charting new ground," and yet they are held accountable for the results, and their reputations will be affected by those results. Todd Joyce, the specialist quoted earlier, who is involved in doing research on learning technologies, describes his position, which permits a good fit between his personal interests and the corporate agenda. He has a Ph.D. in cognitive psychology and, before coming to Just, taught instructional technology at a major university, and has been described as "brilliant" by several colleagues. Nevertheless, even in the case of an excellent fit and probably the most ideal preparation one could have, Todd, like most employees, feels tension and anxiety about whether he knows how to do his job.

I love my job. I think I have a great job. I'm doing what really matters to me. What I'm really interested in is education and how people learn and what I'm doing here really has a lot to do with that. I feel that here I'm really making a difference. I'm getting to do research on how people learn and how we can use the latest technologies. Oh, of course, I don't know how to do my job, but...

Many of those who are newer to the organization and have less experience with this kind of work, feel a great deal of stress associated with continuously having to figure out how to do the work. While employees are hired because they have a set of skills and experience which indicates they will be able to contribute successfully, they need to be able to map those skills and experiences onto the demands of their particular projects and in this particular environment. Most employees try their best to develop strategies which enable them to learn what they need to know, but those strategies often exact a high price in terms of time and what one employee calls "busting himself."

In describing his thoughts and feelings about the daily challenges of his job, Brian Duvane, a course developer says,

I've found since I've been here that each day there's something very exciting, but there's also something very frustrating too. You have all these things that you have to learn, but you don't know where to go to learn them or who to talk to. You just have to kind of make it up as you go. And there's a lot of risk in doing that. You can kind of go on your instinct or intuition, but you never really know if you're doing things right.

As Kevin McDuff, a course developer said,

I think everyone has a basic insecurity that maybe they're not doing a good job. Even if they're very, very qualified. So they tend to do things to bolster their image, with their managers and their peers. They even do things that are maybe not necessary, just so they'll look good in relation to their peers. Like today, I have three things I have to get done. The most important one is to get out an electronic mail. It's actually the least important priority as far as getting my project done, but it's most important because I need to let other people know what I'm doing so I can create the perception that I'm doing what I'm supposed to be doing and doing a good job.

And Alan Simons, another course developer said,

I haven't been here that long, but I can already see, I'm spending a lot more time here than I want to be spending. On my last project, I really busted myself. And that was OK cause I really believed in it...But I don't want to bust myself on

everything...Cause I know that time is precious and life is precious and it's too easy for it to pass by and get taken up completely by work.

And Theresa Melton, who, before her promotion to a position as a field training manager, was thought of as one of the most capable course developers, describes the tension that she felt and that she observed others experiencing as well,

It's this fear that we have, that you can't be wrong, that you have to be perfect, that you have to be successful here...so there is a lot of defensiveness, covering their ass if they needed to do that, and also they struggled and suffered a lot more than they needed to. They could have just said simply, 'I don't know how to do this.'

And yet, when given a task or assignment, people rarely say, 'I don't know how to do this.' Somehow the culture "gives off" a message that makes people feel unsafe, feel stupid, and unwilling to admit that they don't know how to do their jobs. In my interview with Theresa some of the underpinnings of this cultural message become exposed.

Theresa: I'm not sure why we can't better prepare people for the roles they have to take on. Or if they've come into a job, why we don't do more nurturing, in the beginning, and make them really believe that it is a safe environment to ask the questions, to raise the issues, cause we don't do that. We say that, but we don't do that.

SR: Well, I'm not sure we want to make it a safe environment. I mean, the only conclusion I can come to...is that when you net out a lot of these things, the bottom line is survival of the fittest.

Theresa: Oh it is!

SR: And that as a business proposition, we don't want to invest heavily in nurturing and training because that takes a lot of time and money, and resources.

Theresa: You're right. You're right.

Theresa relates her experience with this dilemma from her point of view as a manager. She highly values teaching and nurturing people as she stated

earlier, and yet, she understands the values of the business world. Cost effectiveness and return on investment are the yardsticks against which all decisions and activities must be measured. In the workplace of Just, there is never enough time to do all the things that must be done, so making time for training and nurturing means something else won't get done. The business priorities and pressures of the workplace often force teaching and learning off the priority list. In the segment below, Theresa, as a manager, wrestles with her desire to invest in someone and the shortage of time to do so.

But I think that some investment needs to be made. From a business perspective there'd be a tradeoff for me in that I don't want to do a lot of that. I want somebody to 'Uh-huh,' [as in, 'I get it'] and I want self-starters, that can just look at something and figure out what needs to be done. I don't have the time. And yet, I've just hired a new person, so I'm going through this, and I can just share it with you, and yet it's really important for me to do some investment in this person. To help them to be a success here. I don't want to control them. This guy is very high level, and he's really, really good, and he's been around. He's not a kid. And I'm real excited about him. But I...still need to make some investments that we're not making. Maybe not to the extent that a lot of other companies do...but some investment to at least equip them...you just have to provide someone with a skill set to figure things out. And the where-with-all to go do it. Cause we don't have the time to take them around and run them around and do these things. But I think we don't prepare people.

Change is a constant. At Just, once a job is defined, it seldom remains fixed for long. As organizations, management, market requirements, and job requirements change, the roles of the individuals change. They frequently need to readjust and re-negotiate the balance between the way they derive meaning from their jobs and the new requirements of the newly defined jobs. In this ongoing re-adjustment and re-negotiation process, the employee may not be able to achieve a satisfying fit between personal and organizational agendas. Even when there is a good fit, employees are constantly, "on the learning curve," trying to learn the new job requirements as they execute projects. This situation creates tension, tension inside the employee and tension that spills over into the work environment.

For many, the constant adjustment to change is very demanding, both cognitively and emotionally. It involves meeting the standards of excellence necessary to get approval from customers in the field, to get respect from one's peers and manager in the workplace, and to satisfy one's inner need to achieve excellence. As one course developer put it, "When I started, I didn't know the questions to ask, now that I finally figured out what questions to ask, I'm on different projects." And in a conversation between two course developers:

Mathew: The problem is sign-off. Just is laissez-faire. People sit in a meeting and talk and then you come back a week later and they've changed their minds.

Karen: No, three months later! [after you've done three months worth of work.]

Negotiating responsibilities then problem solving as you go. Each time a new project is assigned, the team members negotiate the way the work will be done. While there are certain tasks that must be done, there is flexibility in how they will be done and on some tasks there is flexibility on who will do them. This allows individuals to seek the best possible fit between their skills and agenda and that of the organization. Once this negotiation is complete, employees still need to learn to perform the many unique tasks required by each project and to deal with the issues which arise each day. The nature of this work is problem solving. It is not the kind of work that can be mastered because each project presents a new set of challenges.

The work of the training department consists of designing, developing, producing, and implementing training programs for products that are changing, for a marketplace that is changing, in a business environment that is changing. Therefore, constant learning and problem solving are the nature of the job. As one employee said, I'm "constantly having to reevaluate and adjust strengths and weaknesses through learning." And another commenting to a group said, "The trouble is you can't learn from your experience." This employee is referring to the fact that the frequent changes in strategies, team members, and procedures mean that each time a course development team goes through the cycle of creating a course, the process is

different, sometimes dramatically so. Nevertheless, previous experience in this environment is always valuable and probably the single most important "teacher." As Beth Whitney, an employee with administrative responsibilities said, "there's a lot of unwritten processes that take a long time to figure out and learn and they change all the time, so I think knowing those and seeing those evolve, and why they are the way they are. I think that makes a big difference." Later in the interview she explained,

When we went through the new product training, that was the first time I really, full force, went in there and did everything. It was really hard. I spent most my time doing that. And I'm finding that now we're...doing new product training again, it's not as hard. I mean, it's not unknown. I know when I have to have these things in, and I know what the process will be afterwards, and so I find it's taking a whole lot less time too...because this time I know what I'm doing.

Beth has had the opportunity to learn and benefit from her experience and finds satisfaction in the process of becoming more capable, confident, and efficient. On the other hand, the constant changes in business priorities, development processes, and the need to stay current with the ever-advancing technology create a high stress level. The employees' flexibility and ability to tolerate stress and change are put to the test by constant changes of this nature. To adapt successfully, individuals need to be able to change direction frequently and with little notice. This may mean dropping one project and starting another or changing the goals, dates and budgets of a project in which they've invested a great deal. In order to work successfully under these conditions, employees need to accept change, learn quickly, make decisions--frequently with insufficient information, take risks, act on their decisions, and produce results. Becoming overly attached to or invested in one project, one way of doing the job, or one team of players can lead to disappointment and frustration. Experienced employees learn to expect the unexpected and to be prepared to change quickly. They have discovered that the odds are always good that they'll be thrown a curve.

Coping with change is valued in this culture. Culture is a particularly human phenomenon which serves to help humans adapt successfully to the particular environments in which they live. In order to support successful

adaptation to this culture, the values promoted by the company place a high value on the ability of employees to adapt to change. At the many company and department-wide gatherings, executives frequently speak with great pride about Just's ability to attract and offer growth opportunities to those who enjoy and adapt readily to change. They frequently speak of the fact that, in this industry, success and even survival depend on a company's ability to be "lean and mean," "nimble," to rise to the challenge of being quick on its feet, quick to learn, quick to adapt and take advantage of the opportunities available to those who can "ride the waves of change." Company leaders frequently acknowledge that living this value is challenging. All employees receive excellent salaries and benefits, can participate in the many company sponsored lavish parties, work in an environment appointed with the best and latest in office furnishings, amenities, and comforts, and experience the feeling of being part of something special, important, and meaningful, something larger than oneself. Stellar performers, those who make exceptionally valuable contributions, receive the companies highest rewards: recognition, high salaries, bonuses, and advancement--the opportunity to play for higher stakes.

And the company does succeed in attracting and contributing to the growth and development of those who thrive in this highly competitive, rapidly changing world of high technology business. Those employees tend to be intense achievers who strongly desire career success and who derive satisfaction from pushing themselves to their limits. As Sean described it, even when they "bitch and moan," they think it's "fabulous." The culture and their inner drive, motivates them to work very hard both at performing their jobs and at adapting to the culture. In their drive to achieve success, they also often become competitive with one another. There is a curious paradox in which employees speak both of their strong desire to achieve and the commitment they have made to their jobs, and yet they also harbor a great deal of anxiety about failing. In a work environment based upon constant change, there are very few rules or known routes to success. "Figuring it out as you go" best describes the process most employees use. Three different employees in the training department share their thoughts on this topic:

I think if there were someone around who could be a mentor I might go to them, but actually it might be that I wouldn't go to them because I don't like to appear stupid. I have this thing about that.

If you look at the people who work here, there are a lot of obsessive over-achievers...They develop incredible strategies to be overachievers and to do a great job...they're obsessively involved with work. And that's the accepted behavior here; that's what's done here at Just.

But I really do think people learn differently here than in school. I mean I think it's amazing, and I never thought about that, that people never question that you're gonna learn something. They never question it. It's just -- you do it.

But it is often easier said than done. In looking at the world of the training department, we will see how this value is lived, and some of the undercurrents that this value creates.

The key theme of the workplace. A key overarching theme which embodies the corporate agenda and applies to all three areas is the belief that what is important in this workplace is to be outstanding, fast, and productive; be cost-effective; always bring something worthwhile to "the party;" learn what you need to know quickly and do so with a minimum of "hand holding." Help others if you can, but not at the expense of your own work. As one employee said,

You need to be great...And here, doing a good job doesn't cut it. You have to be stellar all the time and that makes it far more difficult to be better than the rest when everybody else is doing that. And at the same time, enjoy it, because if you don't, it doesn't work out either. You burn out real quick...It's just that there's so much to learn. I mean throughout my last project, there was so much to learn about the new technology that it seemed like I was constantly just one step ahead of whatever meeting I was in. Whatever conversation I was in where somebody would throw out some buzz word...or something that I wasn't [familiar with] and some flag would go up and I would think, 'Geez, I don't know enough about that area to talk about it.' But it worked out where, before the next meeting...where...I had to talk about it, I had learned a little bit about that area.

Meshing as the key motivation for learning. As the study progressed, it became clear that in this workplace, the key "lessons" employees want and need to learn involve learning how to effectively mesh their personal agenda with that of the workplace. Thus, the nature of the lessons vary, depending upon the way the individual wants to mesh those agendas. Learning is driven by the employees' need to know how to perform their jobs effectively so that they contribute to achieving the corporate agenda and yet do so in ways that keep the job meaningful and satisfying. And perhaps, even more fundamentally, employees need to learn how to achieve the corporate agenda in ways that enable them to perform successfully given their particular skills, knowledge, and ability.

While the ways that individuals mesh the two agendas vary from person to person, patterns do emerge. Certain groups or types of people have similar goals, values, interests, and abilities, and they seek similar "fits" with their work. Individuals who share values and interests tend to create informal groups and alliances. In some cases, individuals form alliances with people who have different interests and abilities so that they can complement each other and teach each other. However, it's interesting to note that although I expected to find quite a few relationships in which individuals with different but complementary skills and knowledge came together to teach each other and create productive partnerships or teams, such alliances were fairly uncommon. Many of the reasons for this unexpected finding will become clear in examining more closely the formal and informal structure and underlying value system of the training department.

As I moved through the training department, spending time with different individuals, their teams, formal and informal groups, I found that no matter who talked to whom, the subtext of most conversations was laden with what I have come to call success strategies. I found that the essence of what needed to be learned in this culture were the messages contained in these success strategies. I had grouped all the success strategies in one folder for analysis, and as I poured through the contents of this folder, it became clear that people are constantly telling one another what to do and how to do it in order to successfully achieve the corporate agenda and achieve personal success in the

process. This telling, however, focuses primarily on the social, political, and global aspects of success, not on the particulars of how to accomplish specific tasks.

Cultural Affiliation

Achieving affiliation through meshing one's personal agenda with the workplace agenda. When people come to work for a company, they bring to the workplace their own goals and values. They hope that they will be able to achieve their goals and find personal meaning and satisfaction through their work. The company, however, has hired each individual to perform a job which has value to the corporation, that will enable it to profit and grow. Tensions exist between individuals' agendas and the corporate agenda. These tensions vary depending upon the individual and the particular demands being made upon that individual by the corporation. Below, two employees talk about the ways they have integrated their own goals and needs with those of the company. Todd Joyce, a member of Just training who conducts research on how technology can be used in training said,

What matters to me isn't about corporate profits. I like making a good salary, and I like Just Computers and I hope they continue to be profitable and that I can be part of it, but what really matters to me is being able to work on helping people learn and using technology to help people learn.

And Theresa Melton, a course developer who was promoted to field manager told me,

I don't have kids, Susan. I always wanted kids and I don't have them, so developing other people, that's why I'm in the training business. It's still some esoteric goal of mine that says I want to make a difference in people's lives. Part of that is the nurturing in me that I will find someone who's maybe not as strong and give them some input.

Sometimes, in fulfilling a personal agenda, employees short change the corporate agenda. Peers frequently notice and criticize such behavior. In discussing an employee who formerly worked in the training department, but who has transferred to another department:

Amy: Well, wasn't he always the programming guru, even when he was here.

Courtney: Yea, but that was just the trouble. He was spending all his time on programming, but he wasn't getting the work done that he was supposed to do. I remember many days he'd come in exhausted because he had pulled an all-nighter developing some special program, and it was probably brilliant, but he would have also missed an important deadline on a project he was supposed to be working on.

Amy: Oh really, I didn't know that. I thought he did really great at everything.

Because success in this workplace depends upon teams in which each member pulls his or her weight, employees engage in an ongoing and often tacit process of evaluating the contributions of their colleagues. It doesn't seem fair when others have to work harder to compensate for colleagues who aren't doing their share. Furthermore, almost all employees feel deeply invested in the success of their projects and their department. When some place their personal agendas ahead of the corporate agenda, causing a project to suffer, colleagues feel resentful. They may exert pressure upon the offending party. Employees frequently engage in conversations like the one above between Amy and Courtney in which they evaluate their peers.

Employees in the training department have reputations based upon how others perceive their contributions. "Stellar" employees are highly valued and respected. They achieve social status because they make significant contributions to the success of their projects, the department and others in the organization. Those who produce, what stellar course developer Jean O'Donnell calls, "bunny pellet output," do not receive the respect of their peers nor the rewards and recognition the culture has to offer. The workplace grapevine functions very efficiently in informing employees "who's hot and who's not."

This cultural context then creates a tension for individuals. Powerful cultural forces exert pressure upon employees to achieve the corporate agenda, while another set of powerful forces within each individual pulls that individual to find personal meaning in this context. The story being told in this workplace

is the story of individuals working and learning to reconcile that tension between personal and organizational goals, values, and interests. To the extent that individuals can align their goals, values, and interests with those of the workplace, they will achieve a good fit with the organizational goals. For others, the tension between the corporate agenda and their own is more significant, and learning to resolve it is a more difficult process.

In their attempts to create the best possible fit, individuals seek positions that promise a close alignment of individual and work goals. And since there is quite a bit of flexibility in how one defines one's job, individuals define their jobs in ways that permit them maximum satisfaction by focussing on their areas of greatest interest. They also tend to define their jobs in ways that allow them to play to their strengths and finesse their weaknesses.

It's important to note that simply aligning one's goals with those of the organization is only a part of the process of reconciling the tension between the personal and the organizational agendas. For most employees, the more challenging process involves learning what one needs to know to achieve both agendas in a cultural context that changes constantly and provides very little formal support for the learning process. Those who can "bootstrap" themselves, learn quickly, take the initiative, create their own curriculum, and take advantage of a wide variety of learning opportunities are most successful in this culture. Although some formal learning opportunities are offered by the department, most of the learning that takes place is self-initiated. I will describe the array of learning opportunities available later in the ethnography.

Cultural Values –The Unofficial Social and Cultural Division Within the Training Department

In talking to members of the training department, it became apparent that the department consists of two primary groups defined by different interests and value systems. One group consists of people who are most interested in and place the highest value on technology and the other consists of those who are more interested in the human issues of the business. The formal organizational structure reflects this division between the two groups, but

there is an informal social and cultural division between the two groups as well. It is quite apparent among the course developers.

The informal structure among course developers. The course developers divide into two main groups. One group develops training on more technical topics and the other group develops training on topics related to the sales and marketing of the products. These two groups form two separate branches on the organizational tree chart. There are three technical course development groups, each with its own manager. The three groups report to a second level manager, Andrew Bradford. The two sales and marketing training groups report to a second level manager, Catherine Pierce. Not only are there two different chains of command, but the two groups are also separated physically. They sit on opposite sides of the building. The members of these two groups and the other members of the department have various informal names for each of these two groups. Some of the technical course developers divide the world into "black & whites" and "grays." "Black & whites" are those whose personal agendas revolve around the technology and technical topics. The "grays" are those who are more focussed on people, marketing, and sales skills. These two ways of describing people, extend beyond the course developers. People in other job functions are frequently categorized in those terms. Other informal names used by members of the training department to capture this important division of types include: the "techno nerds" and the "liberal arts;" the "hard skills" and the "soft skills," the "propeller heads" and the "expressives." I'll generally use the terms black & whites and grays, except where an employee has used other terms.

To elaborate further on the general distinctions between the groups: black & whites are the more technical people who are interested in how to make things work. They enjoy problem-solving and troubleshooting, particularly in tackling technical problems that have clear, objective solutions. Designing and "bringing up" networks of computers, using the latest technology to develop a course that brings video capabilities to the computer, or developing a course that teaches people about the most innovative and powerful capabilities of a new, state of the art computer – these are the kinds of topics that interest the black & whites. They enjoy learning and working with technology and technical problems that have provable, tangible solutions. As

the name suggests, they prefer dealing with problems that have clear cut, black and white solutions.

The grays are interested in people and the issues involving them. In the training department, they are the people who are more attracted to learning about and understanding why various groups of people would buy computers; what kinds of work various customers do, and why a particular capability of the computer would be of interest to a teacher or a banker or an artist. How do such people make decisions about buying computers? How would a salesperson behave in order to sell Just's products to these different types of customers? What would the salesperson need to know about the technology to be successful? The grays are typically less interested in how the technology works and more interested in what can be accomplished by the computers and how this would be beneficial to people in different walks of life.

Black & whites and grays exist throughout Just and in fact in all high technology companies. In all of these environments fundamental tension exists between the black & whites and grays. A recent Harvard Business Review interview with George Fisher (Avishai, 1989), the CEO of Motorola captures this tension particularly well. Fisher calls the black & whites "the technologists" and the world of the grays is represented by his description of "the sales force." Fisher's remarks about Motorola are quite applicable to the situation at Just:

Interviewer: In an increasingly technological world, no one can win on technology alone. How has Motorola responded to this paradox?

George Fisher: Here's the question we're wrestling with – How do we get the people inside Motorola who know the customer best to have greater power? Our answer is to develop a management system that essentially flips the organization – a system that empowers the sales force.

Members of our sales force are surrogates for customers. They should be able to reach back into Motorola and pull out technologists and other people they need to solve problems and anticipate customer needs. We want to put the salesperson at the top of the organization. The rest of us then serve the salesperson....But what a threat to the

technologists. I grew up in that world; I am a technologist. Many of us share a certain arrogance – we know all there is to know about technology, and technology is the only thing that matters. It's also a threat to the existing power structure inside technology companies. Sales just doesn't have the same stature as the technical side...In fact, there's an adversarial relationship between sales and the technologists. (pp.107-8)

An interview with Sean Miller, a black & white course developer at Just, reveals this tension:

Sean: It seems like technical people always have the chips. Because when somebody needs something like information, it's usually that they need something quick, and technical people always get to be heroes. The pay-offs and the gratification are immediate. Whereas in other things, it's there, but it's strung out over time and usually they're not a hero, but if somebody's got a problem or they're in a jam... when your system crashes, or you've gotta get that presentation out and you don't know how to do something, and you're pressed for time and you grab a technical person and they come in and boom, boom, boom, they've got it - they're gods or goddesses.

SR: So we know what you're bringing to the party. What do you think the other people, the grays, are bringing to the party?"

Sean: I think the grays are very creative. [laughs]. All of a sudden no more words came into my head. [laughs again]. I'm trying to be very nice. Creative.

SR: You don't have to be nice. I mean if you don't think they bring much, you can say that.

S: I mean I think we live in a fairly balanced ecosystem and everybody's part is needed, but it's not always very apparent what part folks are playing. [laughs again] Havin' a real tough time with that one.

SR: Would you say that's generally the view from the black & whites?

S: I think the general view may be...that they don't share an equal value-add. I think they would agree yes there is value to everything between black & white, but it's the black & white that's supporting everything in between and not the other way around. And that without the black & white, the grays would have nothing to support and nothing to do and everything would be kind of soft and mushy. Yea, a lot of creative stuff happening without moving forward very quickly...

There was a time where I very strongly questioned the value of the grays, and now I think I have softened over the last couple of years to just believe that there is some value there. There's gotta be some value there, but I would have to sit down and put some thought and wiffy language into what the value is. I mean when we talk specifically about what training is, I understand what that value is, because we need to sell, I mean bottom line we need to sell boxes, and people need to learn how to sell so we've got grays who are talking about interpersonal relationships and the situations that arise in the sales cycle and so on.

It's not a question of value, it's just in my own value system, it's not important to me. I mean in the big scheme of things, if I got to create my own planet, the mixture would probably be the same; there's absolutely value to the gray. But to me personally, I don't have any interest in it. I just don't care and that I think would be unanimous to everybody in this side of the building, [the black and white side] because if it wasn't, they wouldn't be on this side of the building, they'd be on that side of the building. So in thinking and talking out loud, I think to summarize it is not so much the quantity of value add of the grays, it's how important is it to us in what we do, and we could continue to do our job without them. We could continue to do our job if the rest of the building was blown up and these cubicles [motioning to the black & white cubicles] remained; we could do our job. We could live our lives. We don't spend that much time over there... I don't think there's a vast network across the halls. When I'm over there, I never see folks from here sitting there and chatting. And when I see anyone from over there down at this end of the building I usually think that they want something [laughs]. So I'm sure that there's an absolute value; I would be ignorant to say that there wasn't, because there's so many grays gainfully employed everywhere, but to me personally, they excel in areas that aren't important to me.

SR: Do you see what they're excelling at as important to the business of Just Computers?

S: Yes, to some degree. Yes that that ingredient is necessary just as you put some sage in a soup, but if it's nothing but water and sage, you're not gonna have a very tasty soup. So, yea, there's definitely a place for them. Now the question is, is the balance the right one? No, then I would say absolutely not. I would say there are far too many grays in this company than is required...

In asking other black & whites whether they agreed with the statements above, they agreed with the basics but also tended to temper their opinions somewhat, acknowledging that what the grays brought to the party had value too. Mathew Field responded to the above remarks by saying,

Technically oriented people...generally like to work with tangible problems where there is a solution, and it's just a question of finding out how to find the solution...whereas when you're dealing with people [laughs]...I don't want to deal with people because it's too hard. And in fact, the grays may think that the technology may be too hard, but I would say conversely that the techno-types, whether consciously or unconsciously, think working with people is too hard...the realization I've had is...that...sales people [grays] may be scum, but if they didn't exist, we wouldn't be selling anything and I wouldn't have a job.

Grays believe that the issues in which they are interested are vital to the success of the company. They tend to respect and even feel intimidated by the technical knowledge and skill of the black & whites. In general, they readily acknowledge the value of that perspective and that skill set, but they also believe that, without people who are skilled at selling ideas, working the business issues, handling the organizational politics, addressing the human side of issues, the company could not succeed. Jean O'Donnell, a course developer, captured the qualities that grays value when she said,

When I have a task to do, I start with the big picture. I can't complete a task unless I can see where it's headed and why and have some kind of umbrella over the whole thing. So I do bring to the picture, the ability to see a big picture, and for a lot of people, it helps clarify it for them. The other thing I guess I bring, people tell me I'm a good organizer and a good supervisor of things.

In talking to many people, both black & whites and grays, it became clear that the black & whites clearly value the skills and talents they bring to the party more than they value what the grays bring. Interestingly, the grays also tend to value the black & whites' talents and contributions over their own. They often put talented black & whites on a pedestal, talking about what technical gurus they are and alluding to their own limited talents in this area. Technical knowledge is precious currency in this culture. Those who have it do seem to "have the chips." Nevertheless, Just is a business, and while black & whites don't want to be bothered with, and tend to discount the importance of, budgets, sales skills, people skills, administrative procedures, and concern

with the bottom line, people with skills in those areas are crucial to the company's success. Nevertheless, the black & whites remain on a pedestal.

Working relationships between grays and black & whites: Theresa, a rare success story. When Theresa, who has a great deal of business experience first came to Just Training, she was assigned to work with a team of black & white course developers. In reflecting on her first impressions, she commented that, "Just had hired all these wonderful, incredibly talented technical people who knew nothing about business...and we're still working with them." She also realized that the members of this black & white team to which she'd been assigned did not value the gray skills that she brought to them. She was not eager to take on this challenge in her first assignment at Just. As she said,

With Sean and Don, it was an uphill battle. And I -- thank God, I almost gave up. I said, "Alright, I don't want this team. I don't want to do this." I was unhappy. But we started making progress and then we were both sides motivated to the partnership. And it worked.

Theresa came to teach the black & whites on that team that they wouldn't achieve their goal if they focussed only on the technical development of the project, the "black & white" side of it, even though that was what they enjoyed and excelled at. The team was extremely committed to and enthusiastic about their project but had been embroiled in a time consuming and frustrating battle to convince upper management to give them the approval and the budget to move forward in their own way, with the right to determine the final outcome of the project.. Management was unsure it wanted to invest heavily in an unproven new technology. It was at this juncture that Theresa was assigned to the team to take on the business issues associated with the project. The team didn't want her, and she didn't want them. She describes her early days with the team when she tried to teach them about business and they rejected her help,

It's like knowing that you're right and it doesn't matter. It sounds so egotistical, but relative to the team I had a lot more business experience. I've never done this in my professional career—I was so mad one day...I had to step out of the meeting

and walk around the building because I was so crazy and I did not want to lose it. And I came back into the room, which I would not have done years ago. Years ago I would not have swallowed my pride and walked back in...Because it's so frustrating...it's like being a parent in a lot of ways. You've had the experience, you know what's gonna work, and you can't make anybody do that until they experience it themselves. You can talk to them about it, you can share with them your ideas, but you can't make them learn the lesson until they do it themselves. And that's part of what happened with the guys.

Before long, however, Theresa had gained the respect of the team. I learned about this story of Theresa and the black & white team when I was attending a team meeting with Sean, Don, and the rest of the technical team seven months after Theresa had moved on to another position (a promotion to field training manager). The project had concluded successfully, and the team was planning a party to celebrate its success. They had to decide whether they wanted the party to include the extended team, or just the small, core group of black & white course developers. They decided to include only the core group, the ones who really did the work on the course. They unanimously agreed that the sales and marketing members of the extended team ought not be invited. But then Don said,

I would feel bad if we didn't invite Theresa, for example. Because she was so intimately involved for so long that even though she's out in the field, to me, she's still a part of our team cause she got things done for us.

The rest of the team immediately agreed. After the meeting, I asked Sean and Don, what it was that they valued about Theresa, given that she was a gray. They both had no difficulty in articulating why they respected her and viewed her as a valuable member of the team:

1. She served as an insulator. Theresa insulated the team from the politics of the organization. She was a skillful negotiator and advocate for the team. She went to numerous high level management meetings, presented the team's point of view and won their political battles. Not only did the team get the wins it needed, the black & white team members became free to focus on the technical work they enjoyed because Theresa took on the

business tasks. She had the experience and expertise to successfully negotiate the tough issues. She understood the bottom line, business arguments which would be convincing to management and presented them in an unemotional, professional way. The team members could not have been nearly as effective as Theresa in this area.

Theresa described her perspective on this issue and how she gained credibility with the team. She described numerous analogous situations in her career in which she had had to earn the respect of technical, black & white team members whom she either managed officially or with whom she needed to work without the benefit of any organizational authority. She had learned a lot from these experiences and had been able to deal with each more effectively and less emotionally as her experience increased.

When I went to work with the technical team at Just, that was my job. I had to deal with them. And again, the people that they were dealing with in the research lab were the same way.

Absolutely abusive if you were not technical. I mean, Jacques Porret would scream, and scream "Fuck you" and everything else. I mean Don even one day asked him to put a rock down. He had a rock in his hand. He looked like he was going to throw it at me. Don said, "Jacques, put the rock down." He attacked me in front of about 50 people. And I returned his serve very diplomatically, responded to his issues. And Don saw some of that. I mean he was with me. One day I asked him to go, in case there were [technical] issues that I couldn't address. He never had to say a word. But, I wanted him to be there, and also I wanted him to observe. Because it did give me credibility. I had him. I felt safe because Don was there. If I couldn't answer something [technical]. And also so that he could see what they [the black & white team members] weren't having to put up with. There were some very very ugly events that, I think, had I not had the years behind me that I did have, coming into the training department, I might have suffered a lot. Cause he would scream. And the guys didn't wanna deal with that. They didn't have to deal with that.

2. Theresa was a quick study at understanding the technical aspects of the project. As Don said,

She may not have been "technical," but she knew enough to present our ideas and answer questions at those meetings. She really had to go to battle and always went out there. Some problem would come rolling down the pike that looked like it might kill the whole project and we'd say, "Theresa, can you deal with this?" and she always would. Sometimes she was really dangling out there too. But she was very good at that.

3. She took on the business tasks. The financial management of the project was another major task. The overall budget was approximately a million dollars and expenditures needed to be forecasted and monitored very closely. This was another task that the team found distasteful, time-consuming, and one they were not skilled at. Don described Theresa's contribution here by saying,

She had real skills. Business skills. She worked out all the finances in the beginning. It was pretty complicated. She set everything up.

4. She believed in the team. The team had worked hard to design a comprehensive, innovative training curriculum and an advanced technology to deliver the major portion of the curriculum. When they were ready and eager to begin to realize their vision, they found that those who had the power to approve or "kill" their project were skeptical. At a time when few people outside of the team wanted to support them, Theresa did. As Sean said,

She believed in us. She always believed we were doing the right thing with this curriculum. I don't know why, but we never had to sell her on the fact that what we were doing was right.

When I asked Theresa for her perspective on this she added more insight about the circumstances that led to being accepted by the team. She described a turning point in the early stages of the project. Because the project was so important and costly, higher level managers had come into meetings that the team was holding with their vendors. These higher level managers had tried to take over the negotiations. Theresa had played an important role in keeping the control of the project with the team and not letting the higher level managers usurp their authority and autonomy.

They knew I didn't have technical expertise. I had to demonstrate what value I could bring to them, and why I was there was to manage the customers, was to manage their budget, was to really manage them... and I'll tell you where I think the turning point occurred, we had a very nasty meeting ... and I thought the technical team was being undermined. I felt that nobody was standing up for the team...I put cards on the table for them, on their behalf, I basically said, we were humiliated. That it was really embarrassing for us to be there, and have...these people [the vendors]... not even...acknowledge us...and yet we were the people who were responsible for managing the program and managing the relationship. It was wrong. It was really getting in the way of our successful business. So anyway, the point of the whole thing was that I championed their cause for them, and I articulated to their manager, in front of them, what I thought had happened, from my perspective. [Then] the guys wanted me to represent them. They said, it was like all of a sudden I was one of them. That's where I think the turning point came into play because I could articulate what they could not, in terms of what I had observed of what happened. They asked me to do that. William [the manager of the technical team]... said, "I want my team to speak for itself." Sean turned and said, "This team is speaking for itself. Theresa is a member of this team." And they had come to my defense...that night. But what they did learn, they learned from observation. They watched me manage certain people, watched me manage sessions, watched me bring to light things that they needed to do that they would not have thought of doing, because they were channeled this way, and I had to look at everything else, and I could do that. So I think that was when all of a sudden I felt like a member of the team, when all of a sudden I was being accepted.

This example of a team with strong mutual respect for different skill sets and value systems is far more unusual than one might expect. More often feelings of discounting the strengths of the other, defensiveness about one's own strengths, and power struggles between who will have the upper hand tend to undermine productive partnerships on teams involving both black & whites and grays. In looking at the reasons why Theresa was effective, we can capture some of the key ingredients for success:

1. She had a great deal of experience in the training business. She knew the ropes. She knew how to set up the spreadsheets and manage the

finances. She knew how to negotiate with upper management. She understood the corporate agenda and could present the team's position in terms of its merits in achieving that agenda.

2. She had a great deal of experience working with black & whites. She understood their values, their interests, their strengths and their weaknesses. She knew that the most effective way to earn their respect was to provide them with services they could not or did not want to perform themselves. As she said, "I had to find out what I could bring to the party...And I did that. And I was able to do that in an arena where number one, they didn't have any expertise nor did they have any interest in doing that." She also had the skill to deliver on her promises and subtly demonstrate to the team how skillfully and hard she was working at doing so.

3. She was a quick study at learning about the technology. She was able to learn enough about the technological aspects of the project to extract the key issues that the team needed to address. She could represent the team, including the technological aspects of the project, effectively to others.

4. She had the emotional stamina to endure a period of rejection. Because she had been through similar experiences, Theresa had enough confidence that she could win the team's respect and be effective if she stayed the course. Enduring the early phase of the relationship when, as Theresa says, "I was really unhappy because of this butting of heads."

In a nutshell, the ingredients of success for a gray who worked very effectively with black & whites can be summarized as:

1. The ability to apply relevant business skill and experience effectively
2. The ability to apply relevant people skills and experience effectively
3. The ability to master the basics of the technology and surrounding technological issues quickly and capably
4. Emotional maturity and stamina

Because so many of the employees at Just are young and relatively inexperienced at business, they are learning as they go. And part of that

learning process involves making mistakes. In a high stress environment where people have a great fear of failure, and where failure is often defined as "being less than stellar," employees who are relatively inexperienced and whose professional expertise is just developing have a difficult time convincing those with a very different skill set and value system that they have an equally valuable contribution to make to a project. Grays with less experience, expertise and emotional maturity than Theresa would have had a very difficult time working effectively with a team of black & whites. Although Theresa was not formally the group's manager, she provided management services to the team. This is a valuable service in business and yet many black & whites do not value it. They tend to look at management skills as "soft skills," "all that expressive stuff" that doesn't really add to, and in fact often gets in the way of, the main job of developing technology. As Sean said,

I think the black & whites are a very tough group. By most standards, they're management eaters... a bunch of motivated, self-driven people that don't really need a manager.

An analogous situation exists for black & whites who work with grays. Although they are valued for their technical know-how, they often are not valued by the grays because their preferred approach to work doesn't involve analyzing the big picture, or seeing the human side of business. Jean describes a classic situation orchestrated by a black & white who was responsible for introducing a significant new technology to the department,

I remember, this is several years ago, networks came, and Barry White set the department up on Just networks and so, all of a sudden, you can picture, Brian [the director of the department at the time] just said, 'OK, everybody will use Just networks,' but nobody trained anybody on that...so Doris Patterson was scared shitless of using Just networks, and here she...she had tried to get Barry White to show her stuff [to show her how it worked], well that was just a disaster.

While the discussion above may make it seem like the boundary between black & whites and grays is hard and fast, these divisions are not quite as "black and white" as they may seem. Some grays are quite interested in and

Table 3-1

Gender Correlation Between Black & Whites and Grays

	Male		Female	
	B & W	Gray	B & W	Gray
Course Developers	14	4	6	10
Other employees viewed by selves and/or others	9	4	3	36
TOTAL	23	8	9	46

As Table 3-1 shows, this correlation supports the stereotype that males are more drawn to the technical areas and women to the people issues. Much has been written about and much research has been aimed at better understanding the causes and explanations for this phenomenon. It is not my intention to explore these issues here except to say that Just reflects, in microcosm, a widespread finding regarding gender and social preferences. It is also interesting to note that the male dominated area, the technical area, is the one that "has all the chips" and is more valued by both men and women.

On the other hand, the skills and talents required to climb the corporate ladder, to advance and gain status from the perspective of the corporate culture, are those skills and talents associated with grays: people skills, understanding of broad business issues, working with the administrative processes of a large organization, and the willingness to relinquish working hands-on with the technology. This fact of corporate life creates a tension for black & whites. Their adaptation has been to establish something of a counter-culture. Most black & whites live in this counter-culture which rejects the status conferred by the corporation, the status of traditional advancement and the increased salaries and perks it brings. Instead, they embrace the black & white status system which values technical knowledge, technical "guruhood" above the materialistic rewards available only to those who are willing to deal with all the bureaucratic paperwork and give up getting their hands dirty.

The different status systems of the black & whites and the grays. The status systems of the black & whites and grays have both similarities as well as significant differences. What counts most as status in one group, does not in the other. These different status systems reflect the different values of the two groups and tend to motivate the behavior and learning activities of individuals. Status in both worlds comes from adding value to the department through helping to achieve the corporate agenda. In the training department the primary way that this is achieved is through developing courses that are valued by the field, by colleagues in the department, and in other departments at Just.

Status among black & whites. In exploring each group's beliefs about what constitutes a good course and how one goes about developing one, differences appear. Black & whites are most interested in technology. What counts as status among black & whites is being a technology "guru." Climbing the corporate ladder is not a way to achieve status for most black & whites. As Sean, said,

Status in the black & whites is achieved over time and being tested and the achievements and consistency. It's not achieve status in one hotshot project...I think that [among] the black & whites, you lose status when you climb the ladder. They are -- defy authority...because the higher you go, the less they care about [working with technology].

In a previous interview Sean had shared a bit of black & white folklore,

Sean: I don't think they [black & whites] are interested in climbing the corporate ladder. In fact, I can think of two examples of...black & whites that thought they they did, and after about a year or so [of being managers] decided, I don't want to do this anymore and went back to individual contributors. In the year or two years...those were two absolutely miserable years.

SR: Did they say why they were miserable?

Sean: Because they weren't able to get their hands dirty, to get in...to the technical stuff. Cause they ended up having to master softer skills, people management.

When I asked Don if he agreed that climbing the corporate ladder does not constitute status for black & whites, he responded that he basically agreed because,

As you go up that corporate ladder you have to lose that technical, the rapport that you have with inanimate things. And you have to increase the rapport that you have with people. And so I think that's where the grays come in. Technical is very black and white. It either works or it doesn't work...whereas people don't work this way.

Don noted one important exception, one path in an engineering or research and development organization where technical people would find status through climbing the ladder.

in those situations where technical people...do climb the corporate ladder, but what they get to is a position where they can influence the technical realm. And to me that's a higher technical status to be in...in the category of...pushing the envelope of technology...being able to make the science fiction become reality.

The black & whites in the training department agreed that in training, this opportunity did not exist. Climbing the ladder represented moving away from the technical realm.

Among black & whites, technical knowledge and know-how is status. All of the black & whites I spent time with commented on the satisfaction they got from helping to solve technical problems. Paul Singleton, a black & white course developer, talked to me about this:

Paul: I get questions from all over the country, all over the company, our department all the time, at home, on weekends.

SR: Do you mind?

Paul: I love it. I like to keep current with the questions. Knowing what the questions being asked are is really important.

It's tech support. It's very rewarding. I enjoy working with people, helping them with technical things.

Some black & whites find their technical know-how so valuable that they guard it. It's the "keys to their kingdom" and they don't want to give it away in a fashion that would cause them to lose the status that being the holder of precious, exclusive knowledge confers on them. William Jones, a manager of a black & white group, described this phenomenon by saying,

Status...could be climbing the ladder. And in some cases knowledge. Some people get status because other people look up to them because, "Wow, this person knows all this information." And this person sometimes...like when they go for special training...they hold this information close to the vest. Now they have the power.

Sean added to this,

I think technical people have this invisible chip on their shoulder...At first encounter they are very rough, tough, "What do you want? What part of my brain are you trying to pick?" Without exception, every engineering type that I've ever met, when they are or we are introduced to one another as both being technical, or both being engineers, instantly the hair kind of goes up. It's a different breed. I mean you don't see that with a lot of right brained people. If they find out there's a commonality, they get warm and mushy. I think the left brains get together and instantly there's this competitive sense of competition between the two, as far as fear of not knowing. If there's a fear, it's that: the other person has more experience in some area that you don't.

Some black & whites just get tired of "having their brain picked" all the time.

But technical people are always the subject matter experts, and people are always coming to them for information. After a while, after a few years, it gets real tiring, so every time somebody comes, asks for some piece of information or whatever, there's a reluctance to hand it out, or give it out. The keeper of the keys of information.

Others wish they could do it more. I discussed this with Don, an expert in networks.

SR: Do you find people coming to you, looking to you to be a teacher...if they're trying to learn things and seeing you as a subject matter expert?

Don: Not much, no. I either wonder if I piss people off, or there's just plain not enough time in the day, or I'm hard to approach, or I don't know.

SR: Would you be interested? I mean, would you want people to approach you?

Don: Yea. I would. I love the reward. I used to teach a lot, and to me it's a great high. I really enjoy it quite a bit when I can get some fundamentals across that people take away with them and go, "Oh, now I can build on that. I finally understand. Great."

While some black & whites enjoy teaching and others don't, being taught is a difficult and uncomfortable role for most black & whites. Since status among black & whites comes from already knowing, not knowing and needing to learn is a state that creates tension. Black & whites frequently talked about needing to "come up to speed" on technical domains, and they almost invariably did so in individualistic ways, ways that enabled them to keep secret what they did not know.

Status among grays. For most grays status is achieved through either promotions into management or through expertise in managing projects and programs. In this world, a high value is placed on relationships and rapport with people. For grays within the training department, this circle of people includes colleagues within the training department, the field trainers who will deliver the training, the customers (students) who will receive the training, and members of the sales, marketing, and other departments at Just who participate in defining and shaping the training courses. The means of achieving status and advancement is somewhat different for grays than for black & whites.

Black & whites focus on mastering the technical contents of their courses, and may be less committed to working out all the logistics of implementing the course. Status for grays comes from working effectively with people, being

well thought of, being a strong team leader, or being a valued team player. They spend time communicating with and building consensus with the field and other stakeholders in their projects. In the course of these communications, they care about developing relationships with these people, getting to know them, and getting to know what is important to them. Having a large network of friends, supporters, and satisfied customers counts as status for the grays. It is also what enables them to advance.

For some grays advancement means promotions up the corporate hierarchy. For others, it is achieving a reputation for being highly capable and therefore being able to choose the projects on which one is most interested in working. In many cases status comes from being assigned as team leader on the most visible and important projects. Being assigned to projects that are important to the company counts as status for black & whites as well. For black & whites, however, the key projects they seek involve the newest and most significant technology. For many grays, the goal is to be assigned to projects with as little technical content as possible. Courses with content involving the psychology of selling are among the most sought after. This is the type of topic that appeals to many grays.

In addition, the measure of success varies. Among black & whites, success might be measured by the technical innovations the course achieved or the level of technical content. Grays measure their effectiveness to a large extent through the satisfaction that others express about their work and their interpersonal skills. Catherine Pierce, a highly effective manager, gives Amy, a training coordinator who works for her, advice on how to advance. Catherine shares what worked for her in applying for a promotion, and suggests that Amy apply the same strategy with the hiring manager with whom she will be interviewing.

Catherine: That's what I had told Wallace. Don't talk to me. Talk to the people who I work with. I mean I can tell you how great I am all day long, but you got to hear it from the people who live with me, because that's how you're going to hear if I'm going to be good in the future is probably if I've been good in the past.

One of the aspects of being "good," is articulated by Amy during a day I spent with her as she engaged in her normal work tasks. She was reading an electronic mail communication from Janine Foster and commented,

Janine always writes really thorough E-mails. She's like Superwoman...One thing that's interesting to me in this is that there isn't really anything for me here, but she...sent it to me...I appreciate the fact that...she still involved me in it. But I also get this little pang of guilt because there's probably more I could do to help her with this. A lot of this she's been running around herself, you know trying to figure [it] out. The questions that she's asking to Alicia and Shauna could be questions that I was, you know, facilitating and going in a liaison relationship there.

The skills and know-how that are respected by grays involve communicating effectively, handling all of the implementation, project management, administrative, and people issues. Grays tend to value the social dimension of work and enjoy helping one another in getting the job done. Those who perform well in these ways are regarded as the stars. They are the employees who advance in the gray world. This is an interesting contrast to the comments of Sean who said,

Talking about technical. A lot of the folks that I know either within our group or in engineering or in support, really, truly, I honestly feel don't give a damn about what other people think about them. Whereas on the other side, look at the expressive expressives [the grays]. That is very important to them.

Many black & whites seem to relish the bravado of not caring what others think. They seem to flaunt the fact that they enjoy the luxury of feeling valued on their technical expertise alone, even if they ruffle the feathers of those around them. Grays don't bring the highly valued technical skills to the party, so they earn their place in the organization by contributing to the people, selling, and administrative aspects of the corporate agenda. One of the super stars on the gray side is Catherine Pierce. When I asked employees who they thought was an example of an outstanding employee, her name was mentioned more than any other. When I asked Rhonda Felise, one of the field trainers, what Catherine did that made her so well-respected by the field, she told me that, prior to her promotion to management, when

Catherine had been a course developer and managed train-the-trainer sessions for the field trainers,

Catherine was a perfectionist. She was super well-organized. Her agendas were well thought through in advance, and she stuck to them. If people [field trainers] requested a change or a special speaker, she tried to come through and frequently did. Each day of a training, she would go away with actions. Our day ended when the session was over, hers didn't. She would go to work to try to get us the things we wanted or requested. She wasn't infallible, but if she said she'd get you something, she followed through.

The qualities mentioned here: organizational ability, understanding field needs and priorities, responsiveness to the needs and requests of others, and intense commitment to do whatever possible to fulfill those requests; these are qualities that capture the values and behaviors that earn status for the grays.

Summary of Key Findings

This chapter has painted, in broad and general strokes the values and beliefs that affect learning in this culture. It has looked at three layers of the world of work: the work, the organization and its people, and the culture. Work involves both product and process: the products employees are responsible for producing and the processes they engage in to develop those products. The chapter has highlighted certain characteristics of this cultural context including the fact that change is constant. Technologies, business conditions and practices, and team members all change rapidly. Employees spend a great deal of their time and energy developing success strategies for dealing with these changes.

In looking at the organization and its people, it is significant that the affiliations that individuals form with the company, the department, and the team they work with become important motivators for learning and contributing. The organization reinforces this sense of affiliation by recognizing and rewarding employees for the contributions they make. Employees are most motivated and satisfied when they find that they are

empowered by the company to develop ideas and turn them into realities. When this happens, the individual's goals and intellectual achievements become one with those of the corporation. On the other hand, employees become frustrated when they feel they don't agree with, don't understand, or don't have a satisfying role to play in achieving the corporate goals. At such times employees may feel like, and describe themselves as "pond scum."

In looking at the culture, one of the most striking characteristics is the prevailing value that what is valuable and desirable is being "stellar:" outstanding, fast, and productive, even in the face of challenges and rapid and unforeseen change. As one employee said, "You need to be great...here, doing a good job doesn't cut it. You have to be stellar all the time..." Working within such a driven and competitive environment may bring out the best in people in terms of high productivity, but it also makes it difficult for many individuals to admit that they don't know certain things or don't feel they can keep up the fast-track pace indefinitely. Because the pressure to produce is so strong, individuals tend to play to their strengths, capitalizing on the skills and aptitudes that come easily and finessing those that might take longer to master and which may show them as being less than stellar.

The department is split into two groups. These groups have organizational, as well as social and cultural, boundaries. The black & whites value and spend more time on the technology while grays prefer and spend more time on the business and people side of work. Their learning styles and approaches to getting the job done vary significantly.

The next chapter examines more closely the components of the workplace curriculum and the learning opportunities available for mastering it. It also focuses on the different patterns of learning the black & whites and the grays exhibit.

—CHAPTER 4—

HOW LEARNING IS ACHIEVED IN THE WORKPLACE

Introduction

This chapter answers research question two: How is learning achieved in this workplace? In order to answer this question, the chapter addresses each of the sub-questions of research question two: (a) What motivates learning in this workplace? (b) What are the key components of the workplace curriculum? (c) What are the key learning opportunities through which this curriculum can be learned? (d) What are the alternatives to learning? (e) How is learning demonstrated and rewarded? These questions are answered while I continue to reveal and explore the effects of the underlying cultural values and beliefs about learning and the folk models about success in the workplace.

First, in order to understand what and how people learn, it was necessary to understand the underlying reasons *why* they learn. Therefore, the chapter begins by answering the first subquestion by identifying the motivations for learning in this workplace. To identify these motivations, I made a third sweep through the data, sifting through the entire data set: all the field notes, transcripts of interviews and interactions, and memos I had written. After sorting and categorizing all the data that bore upon motivations for learning, I found two kinds of motivations: broad, overarching, abstract motivations which reflected personal interests and sources of satisfaction, and concrete and task-focused motivations. At the broad level, individuals are internally motivated to learn the things that they find interesting and fulfilling. Because individuals also need to satisfy the ever-changing requirements of their jobs, they also have concrete, practical and task-focused motivations. To answer the first subquestion, this chapter begins by describing those overarching, personal reasons why people are motivated to learn. These quests for personal satisfaction vary for different individuals and provide the motivating force behind learning. These various sources of personal satisfaction are presented in Figure 4-1.

Figure 4-1

EMPLOYEES' MOTIVES FOR LEARNING: THE QUEST FOR PERSONAL SATISFACTION

PERSONAL SATISFACTION MAY BE DERIVED:

1. Through work

- the process—satisfaction gained from visualizing, planning, and executing a project.
- the product—satisfaction gained from completing a project, from achieving a goal.
- the results the product creates, from seeing it benefit and be appreciated by others.

2. Through learning and growth

- learning about technology
- learning how to manage projects
- learning how to manage finances
- learning about business
- learning how to manage people
- learning how to develop effective working relationships with people
- learning how training relates to other functions (new products, sales)
- learning to take on greater responsibility within the organization

3. Through relationships

- supporting others
- leading others
- collaborating with others
- interacting with others
- friendship

4. Through feeling part of a larger community/entity

- the feeling of belonging to and being needed by a group with a purpose
- the opportunity to make a contribution to that group/purpose
- respect from colleagues based upon one's contribution

5. Through rewards and recognition

- respect of peers
- respect of management
- public recognition
- material rewards
- advancement
- selection for projects important to corporate success
- opportunity to self-select projects

After a discussion of the overarching reasons for learning, the chapter describes the more concrete, task focused motivations. These descriptions are presented largely in the words of the employees in the department, thus revealing, not only the answers to the questions, but a rich cultural and personal description about the relationship of the individual to the world of work

To answer the second subquestion about the key components of the workplace curriculum, I first identified the skills and knowledge employees believe are required to perform effectively. To do so, I made another sweep through the data to compile a list of the many types of skills and knowledge that employees talked about or demonstrated. Following are the topics that comprise the workplace curriculum:

1. Marketplace
Knowledge about customers and how they could best use the company's products and knowledge about the competition.
2. Technology
The ability to understand and use the products and technology that pertain to one's job.
3. Instructional design
The ability to design effective courses or training products that meet the department's standards.
4. Audience needs
Knowledge about the needs of the audience/students who attend the courses or use the training products.
5. Business skills
The ability to develop and deliver projects through effective project management, financial management, and people management.

To answer the second research question and reveal how employees learned these elements of the workplace curriculum, I threaded discussion of how these topics are learned through the sections on learning opportunities. Since understanding how learning takes place involves looking both at what is learned and how it is learned, it was necessary to examine the areas of the

workplace curriculum in the context of the learning opportunities through which they are presented.

To answer the third subquestion, I identified all the available learning opportunities through which employees could master these topics. To do so, I again sifted through the entire data set listing all the ways that employees learned this curriculum. In compiling these lists of what was learned and how it was learned, my experience as an employee over a four year period was invaluable. In addition, during the data gathering phase of the study, in order to uncover the ways that people learned, as I observed and participated in workplace activities and saw employees demonstrating or talking about skills and knowledge they used on the job, I would ask, "how did you learn that?" The answers people gave helped to build the data base of available learning opportunities. I found eight key learning opportunities through which the workplace curriculum can be mastered:

1. Observing others
2. "Figuring it out," and "making a stab at it"
3. Media
Reading, listening to audiotapes, or viewing videotapes
4. Apprenticeship to a more experienced and skilled employee
5. Coaching or teaching
From more skilled peers who are Just employees, contract employees or vendors, or friends outside the workplace - a special case of this coaching happens "when someone takes you under their wing"
6. Work experience, at Just or other workplaces
7. Family background, early experience, or formal education
8. Classes and other formal learning opportunities.

As I examined the data and looked at a wide variety of individuals engaging in or describing learning events, I found that the different cognitive preferences, learning styles, and value systems of blacks & whites and grays again served to divide the department and revealed a major point of contrast in what and how members of each group learned. In order to present the array of learning opportunities and how individuals use them to learn the

workplace curriculum, the chapter has a section for each of the available learning opportunities, describing how they are used, who uses them, and what key areas of the workplace curriculum they serve. Where significant, I have highlighted how certain learning opportunities may be used differently by black & whites and grays. The array of individual differences is examined in greater depth in the case studies presented in Chapter 5.

Finally, the chapter concludes with the two brief sections that supplement the picture of learning in this workplace by illuminating two important and related topics. To answer the last two subquestions about the alternatives to learning and the ways learning is demonstrated and rewarded, I draw upon the data sources to provide descriptions and analysis in each of these areas.

The Motivations for Learning in this Culture

As Chapter 3 demonstrated, individuals in this culture are motivated to learn for two primary reasons: to fulfill their own agendas and to fulfill the corporate agenda. To the extent that they contribute to the corporate agenda, employees add value to the corporation. That is what they are being paid to do. Employees also learn in order to achieve their own goals and achieve personal fulfillment. When employees find personal satisfaction in work which fulfills the corporation's agenda, they become extremely valuable contributors because their own interests, needs, and goals are entwined with those of the company. Employees are constantly engaged in finding ways to mesh the two agendas successfully. They learn to define their work in ways that permit the most satisfying fit.

Some fits, however, are far better than others because some fits lead more directly to being outstanding, fast, and productive. The motivations listed in Figure 4-1 form part of the sub-text of learning and behavior. In the discussion which follows they may be seen "between the lines." In the case study section, Chapter 5, they will be examined more closely as motivators of behavior in the case study individuals.

Finding Personal Satisfaction through Work: A Case of a Good Fit

Alicia Fernandez and I talked about learning to succeed. Her remarks describe the relationship between learning, success, and the meshing of personal and work agendas. It's clear from reading between the lines of Alicia's comments that the personal satisfaction she finds in her work make for a very good fit with the workplace agenda. She is one of most outstanding, fast, and productive members of the department. She is also aware of the experience of those who are less productive and proposes an explanation for their behavior. Her explanation amounts to a statement that they have not meshed their agendas with that of the company and the department, or, as she puts it, "they're not committed to the cause."

SR: How did you learn to be successful with no teacher, no model?

AF: I don't know. Maybe it's because I like it. I really do. It's something that, even though I love being home with my kids, I miss it a lot. I miss being at work. [When I first began], it was exciting just learning about it...If I walked into it now, knowing nothing, like I did. Oh wow, it would be scary. Because now the expectation is very high. I don't know, I think the reason I do so well is that I really like it and I believe in it. And because I'm really committed to what training is trying to do which is provide great training and I've always been in training, so I think that's probably why. I can't see any other reason.

I think that's why some people who shall remain nameless, aren't successful at it is because they're not committed to the cause; they're committed to what they benefit and reap from it and what they can get from it, as opposed to what can I give and how can I make it better for everybody else. And I think that makes a big difference in how successful you are. Because it's kind of a round circle where, you start off well I'm gonna work my butt off and I'm gonna really work hard and produce this great thing. And then what happens is it goes out there and gets accepted and it's really widely loved and the whole bit, and it comes back and it pats you on the back and you feel really good. So you constantly find yourself doing this because you feel really good in what you're doing because you know it's doing some good.

And what happens to people who don't do that are, I think, the negative ones, their feedback; it feels kind of flat. They get no satisfaction from it. There's no back patting, and there's no

feeling of accomplishing anything and that continues to feed their negative feelings and makes them worse.

Motivation: Bringing Something Valuable to the Party

One of the important underlying cultural values that sets the stage for what is learned by employees in this culture is captured in a frequently used metaphor, "what you bring to the party." Individual identity and value in this culture are based largely upon contribution: "what you bring to the party." Bringing something valuable to the party enables individuals to feel they are valued members of the larger community, item 4 on Figure 4-1.

For example, one course developer might think that her value to her team consists of her experience in managing and organizing projects, while another might believe that what she brings to the party are her technical skills. What one brings to the party involves the process of meshing the corporate agenda with one's personal agenda. To the extent that one can bring to the party items that one finds personally satisfying, a good fit has been established. To the extent that one's list of personal sources of satisfaction is long and flexible, one has increased the likelihood of finding personal fulfillment and being viewed as a valuable corporate citizen. Employees need to recognize that their value to the corporation does not come from finding personal satisfaction and fulfilling their own personal agendas. Value in the workplace comes from being outstanding, fast and productive in ways that benefit the corporation.

Theresa Melton, a former course developer, is an example of an individual with a keen awareness that her success hinged on finding where she could make a strategic contribution within her work group. As a result, she cultivated the ability to be flexible and adaptive. She also figured out what skills were called for and developed them in herself. Later in the chapter, a more in-depth look at Theresa's success strategy is presented. Below, she describes it in a nutshell:

And I learned there, again, find what it is I could bring to the party that would make me a partner...Figure out what the

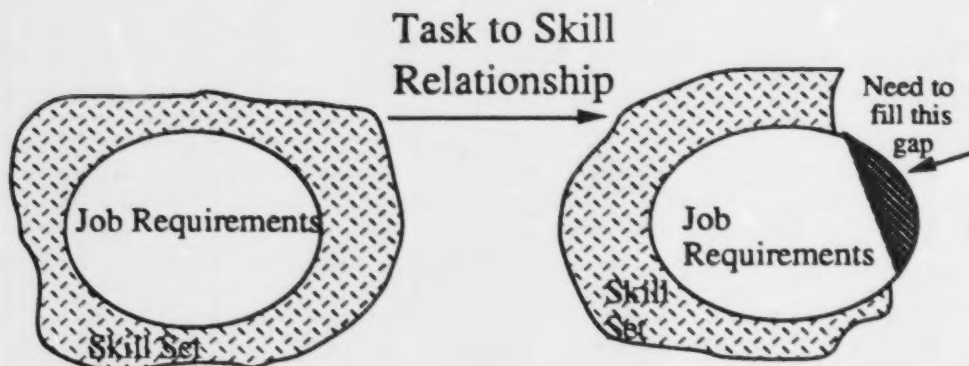
weaknesses were, where I could solve problems, and establish some credibility. What can I champion? And I did that.

Because contributing is so valued in the culture, employees constantly "size up" what they and their colleagues are bringing to this "party" known as work. This sizing up is transmitted through the efficient department "grapevine" and becomes part of an employee's reputation. This reputation becomes employees' currency, their value in the eyes of their colleagues, and the basis for their own assessment of their standing in the community.

Reputation is so important that employees talk a great deal about "managing perceptions." In addition to being able to learn and perform work effectively, employees need to be sure that they communicate or create the impression of their success to others in the organization. A piece of advice that is sometimes given is, "Remember, perception is everything." As this chapter will reveal, creating an image of competence may sometimes be at odds with admitting that there are areas one needs to learn about. The "fear of looking stupid" and the need to create the impression that one is highly competent constrain learning.

In this environment of constantly shifting job requirements, individuals continuously need to evaluate the relative value of what they and others bring to the party. Changes in the workplace often mean that an individual's skills and knowledge become less valued or needed. Individuals are then faced with a need to learn new skills and master new domains of knowledge. Some employees address this challenge by learning what they need to know. Others find alternate ways of trying to fill the gap. The following diagram illustrates how learning needs come to exist and how they can be filled.

Figure 4-2



How This Happens

1. Organization change
2. Job description change
3. Mishiring
4. Environment change
5. New employee/New job
6. New technology introduced
7. New processes introduced
8. Nature of some jobs

Ways to Fill Gap

1. Learn from
 - a. Peers
 - b. Manager
 - c. Subordinate
 - d. Spouse
 - e. Contractor
 - f. Books, tapes, other self-study
 - g. Other
2. Get someone else to do it
 - a. - e. above

Motivation: Producing Successful Projects

On the most visible, concrete level, individuals learn so that they can produce successful projects. Or, if the job they do does not involve the production of a deliverable, per se, they learn in order to perform their job tasks satisfactorily. As noted earlier, this is what they are paid to do and powerful cultural forces motivate and reward productivity. The motivations to produce successful projects will be revealed throughout this chapter as the participants in the study speak about their work, their commitment to it, and the lengths to which they go to be outstanding, fast and productive.

Motivation: Finding Personal Meaning

On a less visible and less concrete level, employees learn how to produce successful projects in a way that allows them to find personal meaning and

status within their reference group. For example, some employees, generally grays, find meaning and satisfaction through interacting with people. Many grays do not derive a great deal of their satisfaction from learning about the technology. They prefer to spend time learning to find and manage other people who can provide much of the technological expertise while they learn about "the big picture" and insure that the needs of the audience are met. Other employees, generally black & whites, derive a great deal of personal satisfaction from "getting in there and mucking around with the technology," or becoming "technology gurus" and they prioritize their tasks differently. They arrange the project so that they can be involved with the technical aspects while delegating the project management "touchie-feelie stuff" to others.

Both approaches can be successful; both also have risks to be managed. To be successful, the black & whites need to learn enough about field needs and how to move projects through the system to insure that all aspects of the project are addressed. For example, if the project is technologically brilliant, but the field doesn't have the equipment it needs to deliver the course, or if the project went significantly over budget, then the project would not be deemed successful by the customer or the department. Grays need to learn skills they may resist. If a project is managed effectively, the team members understand their roles and get satisfaction from contributing, but if the course does not have enough technological "meat," then it will not be viewed as successful by the customer. Both of these examples capture some classic pitfalls to which the black & whites and grays are vulnerable. Both examples also suggest the learning that individuals need to do.

I would like to emphasize again that the division between black & whites and grays is not as hard and fast as it may seem. While most of the black & whites cluster in the three technical course development groups and most grays cluster in the two sales and marketing course development groups and throughout the rest of the support groups in the training department, there are some grays in the black & white groups and some individuals who are quite technical in groups that are primarily gray. A small number of employees feel that they are "in the middle."

Key Components of the Workplace Curriculum: An Overview

The five key topics of the workplace curriculum and the eight key available learning opportunities for mastering that curriculum were listed in the introduction to this chapter. The ways that employees draw upon these various learning opportunities depend upon the individual, his or her preferred way of learning, and upon the nature of what the individual wants to learn.

As I talked with many employees about how they learned what they know, certain patterns emerged regarding *what* topics different people preferred to learn about and *how* they preferred to learn. I came to think of these preferred topics and ways of learning as cognitive preferences. For example, black & whites invariably said they prefer to learn about technical topics to almost any other topic. They all expressed disinterest and distaste for having to "be bothered with" managing budgets and "all the other administrative crap." They also are generally uninterested in learning about people management, team building, and other skills related to interpersonal relations. Many expressed a general lack of interest in interacting with other people. One black & white told me about a conversation he had with his new boss when he first began working in a technical training group,

All I know is that he [Andrew Bradford] had [managed] all the technical stuff. And he told me is that we have a team meeting every week, and he says, "The reason I do is that these people [the black & whites] don't talk to each other. And if I didn't have it every week, they'd never talk to each other." And he basically said, "It's not a team; it's just a bunch of individuals and they all work by themselves and they don't really communicate with each other, or share anything, or you know, work together."

Black & whites also, invariably, said they preferred to learn about technology through "figuring it out." They didn't want someone to teach them how things worked. They learned best and enjoyed learning through a hands-on approach. Several black & whites expressed the opinion that they didn't really learn if someone told them or showed them. They needed to get hands-on and figure it out in order to feel they had "really learned."

Grays expressed just the opposite preferences. They said they prefer to learn about "the people stuff." Managing projects, building effective teams, and designing courses that communicate the content most effectively were the topics in which they were most interested. Putting themselves in the shoes of others, particularly the students who would be teaching or taking their classes, was a topic of great interest. Grays learn about these things in a wide variety of ways: through "figuring it out," through reading, and through talking to others. They spend a great deal of time listening and talking to other course developers, primarily other grays, to people in the field, and to other people at Just who might have insights or information to help them. They feel comfortable in this domain and this type of learning comes easily to them: it is their cognitive preference. Jean O'Donnell expresses this group's talents and cognitive preferences in response to my asking her how she knows what her customers want:

I listen to trainers. I listen to people who have talked to people in the field. I go to gamma tests and beta tests, listen to people there. I listen to the marketing people. I ask them, what did you talk to people about; what are they telling you? Any place I can get it from is where I get it...And part of it is just probably saying I'm probably like that customer in some funny sort of way. I have that ability, some way to put myself in another person's shoes and imagine where they're coming from. And I know I do that a lot. I theorize about what does this other person feel...So feeling, being able to feel who that audience is, is kind of in my skin somewhere.

Grays, for the most part, are not highly motivated to learn about the technology. Their cognitive preferences run along other lines. When they do need to learn about the technology in order to do their jobs, they prefer to learn from people. When confronting a new piece of hardware or software, their initial inclination is not to spend time working with it and figuring it out. Or, if they do attempt to figure it out, when they encounter a problem, their tendency is to get coaching from peers.

These different cognitive preferences play a major role in determining what employees learn and how they learn. Employees show the most interest in their area of cognitive preference, spend the most time on it, and show the

most flexibility in drawing upon a wide variety of learning opportunities to learn what they need to know about their preferred area. They enjoy "figuring out" the solution to the problems in their preferred area and have a high degree of confidence that their solutions will be correct. Conversely, employees tend to avoid learning about their non-preferred areas, and when they need to learn about these, they need a higher degree of motivation based upon a strong work-related need to learn. In other words they learn "when they have to," and when they have to is when the success of their project and their own reputation is at stake. In learning about non-preferred topics, individuals also need more instructional support to learn effectively.

Learning Opportunities

This section describes how employees go about learning what they need to know to do their jobs by making use of the available learning opportunities. In this culture, as in most workplaces, learning rarely happens in discreet, clearly delineated lessons. When learning does occur, a mixture of topics, skills, and cultural knowledge are frequently transmitted and learned through a single experience. The sections below reflect this rich tapestry of individuals engaging in work and learning. The sections and section heads are guideposts. The contents of these sections cross and straddle boundaries. Nevertheless, to make the analysis as clear as possible, I have taken each of the eight key learning opportunities and used the data to show how different individuals made use of each to learn the workplace curriculum. Because the black & whites and grays often made use of learning opportunities in significantly different ways, wherever such differences occurred, I have contrasted these differences.

1. By Observing Others: What to Do and What Not to Do

When asked how they learned to perform a variety of tasks, employees frequently said that they had learned by observing others. As I listened to employees stories of how they learned by observing others, and saw them in the act of learning from others, several facets of this method of learning became clear. Observing others is an effective way of learning both what to do and what not to do. Several employees said that they've learned much more

about what not to do through observing others than they have learned what to do. Good models are hard to find. In order to learn by observing others who are successful, employees need to: (1) have the opportunity to work closely enough with successful employees to observe what they do and the results they get, (2) recognize what it is they do that contributes to their success, and (3) be willing and able to emulate the successful performance.

Theresa Melton described how this method of learning had worked for her.

I had to learn also what was successful. What were the successful people doing? They were prepared. I had a manager - the one manager that I adore the most - he was not a very strong manager but he made me feel like I could do anything. And I have always told him that. He paid me the nicest compliment. He said, "Theresa, I don't care what it is, I could just call you and say I wanted to talk about Deidre. And you're gonna come with everything that you need. You have a case and you anticipate what it is and you're prepared." And he said, "I admire that about you." Because he did one day, he called me and said he wanted to talk to me about Deidre. And I came over and I had all this stuff worked out, and I had her file, and I had, you know, an anticipation of what some of the issues might be. And I was ready. And I learned when I did that how much more credibility that gave me.

Theresa also described how she believed the black & whites who had worked on her team had learned by observing her. Although dealing with politics and people issues were not of interest to them, they came to realize that in order to be effective in the areas that mattered to them, they needed to understand and deal with the politics of the situation. In describing her team, Theresa said,

What they did learn, they learned from observation. They watched me manage certain people, watched me manage sessions, watched me bring to light things that they needed to do that they would not have thought of doing, because they were channeled this way, and I had to look at everything else, and I could do that.

The black & whites on Theresa's team saw how the team was able to get the kind of results they wanted because she was highly capable at managing

people and politics. Through observing the desirable pay-off, Sean, a member of Theresa's team, came to the conclusion that he wanted to acquire some of the skills she had. As he said,

Now a year or two ago, I would have said to you, now I don't give a flying rat's behind what people think about me, or what category I fall into. I don't give a shit. I think that's starting to change, slowly. I don't think, it is changing. But it's changing for strategic purposes. I still don't really give a shit, but I have to. I have to. I don't know how to explain this. I have to make it important to me because I can't keep going around telling people, "I don't give a shit about your opinions." It doesn't work well in this environment. It's fine, it's fabulous if I want to continue to do what I've been doing, but I would like to grow a little bit more and trying to extract where I can from this environment...[because] to continue with what I'm doing, to continue with the same attitude or continue with the same job is going to be very limiting.

Sean's comments reveal some of the things he learned from observing Theresa. He has learned that her ability to show respect for the opinions of others has obtained the kind of results he wants. He is learning to behave more diplomatically. Sean's comments also highlight what has motivated his development. He wants the rewards that this culture makes available to those who can show respect for others and build consensus. Sean doesn't want to be limited to doing the same job. He wants to have additional opportunities and is motivated to change his behavior in order to have them. Sean is fortunate because he has had the chance to observe Theresa demonstrate, par excellence, the type of behavior he needs to learn. Not all employees have the opportunity to observe such outstanding models of success.

2. By "Figuring It Out," and "Making a Stab at It."

Black & Whites Figuring Out the Technology

Black & whites seem to derive a special satisfaction from figuring out new technologies, new hardware, new software, and almost any type of electronic or mechanical device. This fascination with figuring out how things work seems to be something they have always had. Jean says,

I used to tell my friends, 'I'm not gonna buy a car till I can do all the insides.'

And Don says,

If we talk about technology, that was always an interest, I mean from growing up, from experimenting in the garage sort of thing. Blowing fuses constantly because of my experiments not working.

And Sean says,

[As a kid] I was always the one that was taking apart the brand-new television when Mom and Dad weren't around, going to the chemistry store and randomly buying things and mixing them until I found a copper mix that made gunpowder and put a hole in the floor in my sister's bedroom. Just plain cooking and figuring out, you know, putting things together without reading the directions. You read them only if you're in a tight crunch and you have to.

Many black & whites feel that they learn through figuring things out. This theme came up repeatedly. Something in the act of thinking out or "mucking around with" or "getting my hands dirty" as ways of solving a technical problem enables the individual to understand and apply the concept. Don discussed this in a conversation we had.

Don: My inclination is to try to solve it first myself and then ask for help. There's a greater stick-to-it-iveness if I do it that way. If I discover it myself – and it's not, again, so much a discovery as basically following a thought process that I think the developer did, then I retain it longer. So, if I can figure out how somebody did it, then I keep the knowledge much better than if somebody just tells me, "It's this way." That goes in, stays in short-term memory, and then goes out again.

SR: Would you also say there's some kind of enjoyment factor or problem-solving challenge factor in figuring it out?

Don: Yea. Definitely. And that's something that, off-line is something I'm good at, and it's something I enjoy. It's a job I used to hold for quite a while. I was a troubleshooter, and I really enjoy that and I happen to be very good at it. Firefighter, if you will. That's what it was called...for technical problems.

Grays Figuring Out the Technology

A contrasting point of view is offered by Violet August, a gray course developer, who talks about her perspective on learning about technology,

If I didn't feel that it was so impossible getting up to speed on computers, and I suppose if I genuinely, passionately were interested in them, then I'd be in better shape.

And Alicia Fernandez, a production coordinator says,

I am really stupid when it comes to the machine [the computer]. I mean, start it up for me, tell me where the software is. I'll learn how to use the software, and I'll go to the class, but I am not, by no means, somebody who can teach somebody else. I know what works great for me. I can't tell you why it does, but it does.

Not only do black & whites seem to have an aptitude for learning about technology, they get a great deal of enjoyment—they fulfill their personal agenda—through figuring things out. When asked what they found satisfying about their jobs, over and over again black & whites cited the opportunity to learn about the latest technologies and figure out new ways to use them. The metaphor that comes up repeatedly among black & whites is "pushing the envelope of technology." This metaphor captures the area of work in which their personal agenda coincides with that of the workplace: the quest to advance technology and how it is applied.

Over and over again grays claimed that they: are not interested in technology, don't have a desire to "get in there and muck around with the equipment," are intimidated by it, feel they could never "catch up" and learn the state of the art, don't have the time to learn about the technology, and can be successful without learning a great deal about it. However, in spite of expressing such feelings and beliefs, they felt ambivalent. For the most part, they felt uncomfortable about not knowing more about technology. They tended to wish they did because, perhaps such competence would enable

them be more successful. Note that their reasons for wanting to be more proficient with the technology stem more from their desire to achieve the goals they seek than to learn about technology for its own sake. Their attitude is analogous to Sean's attitudes about learning to care what people think. Like Sean, they still may not "give a flying rat's behind" about becoming proficient at the latest technology, but if they want to develop and reap the rewards of this culture, they may need to "make it important."

Figuring Out How to Move Projects through the System

A great deal of the talk among members of the training department is devoted to figuring out, planning, and doing the work. Employees spend much of their time in conversations that try to answer questions such as: What will make the training course I'm developing successful? What does the audience need to know? How does administrative paperwork get processed? What vendors are good? What are the problems in accomplishing various aspects of a project? Who has experience that can be tapped? Who are the subject-matter experts? Will they have time to spend with me? How much will various items cost? When can we complete a project? What will make it good?

Finding the answers to such questions is a key part of the curriculum of the workplace. The answers are not documented anywhere and change constantly. Learning how to make use of the people and other available resources to find or create the solutions often determines the success of projects.

Beth Whitney is an administrative assistant for one of the technical training groups. When I asked her what it takes to be successful in the training department, she said,

You have to be pretty assertive. You have to network a lot. A lot of this department is, you talk to people a lot about, you know you've done things for people so they do things for you. A lot of how quickly things get done depends a lot on if you've worked with a person before. I think we have a lot of unwritten processes. I don't mean rules, I mean processes on the way things get done. I've never been able to

look and read on how everything goes through Warren Eisen to finance. But there's a lot of unwritten processes that take a long time to figure out and learn and they change all the time so, I think knowing those and seeing those evolve, and why they are the way they are I think that makes a big difference. Because coming in new, you have no idea how those things work.

Mathew Field, a black & white course developer describes his experience in figuring out how to do his job.

When I started here over a year ago, Andrew [his new boss] gave me this binder on budgeting and forecasting and says, you know for the first two weeks I was in the training department, I was taking the instructional design class, OK, and he says, 'When you get out of that, I'm gonna sit down with you and Karen [another new employee] for half a day and go through all this stuff, it's really important.' He never did. I just finally looked through it myself [and thought] oh this is easy, who cares, but it was like his job as a manager... to train us, it never happened.

There are two key issues involved in learning how to move projects through the system. The first is motivation--and motivation to learn this portion of the curriculum comes from believing that it is a necessary and valuable skill to learn. While it may seem obvious that knowing how to bring one's products to market is important, it is also a time consuming and paperwork intensive activity. It frequently requires dealing with bureaucratic processes that appear to add unnecessary delays in accomplishing the goal of getting a course out the door. Furthermore, learning the processes requires interacting with various other members of the training department and other departments at Just. Some course developers, primarily black & whites, try, and in many cases succeed, in working around the system rather than following the prescribed procedures.

The typical rationale given for choosing not to follow procedures or learn how to do so was that it is not good use of the course developer's time. Such employees felt they were being paid to develop training, to understand the technology and not to be paper pushers. They also didn't want to work in a bureaucratic company and claimed that Just had been most successful when it was a small company without so many procedures and paperwork, when it

just had hard working individual contributors who did whatever it took to get projects out the door.

Mathew Field articulated this philosophy when he said,

I don't particularly like the project management side. Because, personally, I think most of that stands in the way of just doing the job. I think my own attitude is that course developers spend too much time worrying about budgets...I think it's somewhat silly that people who are not accountants and who don't have accounting backgrounds are sitting there worrying about money and budgeting. So I don't want to do that.

Examples of black & whites who had succeeded in getting projects out while bucking the system and ignoring the rules of the game became folklore among the black & whites. The renegades and rebels who were responsible were looked at as folk heroes. Mathew Field told one such story,

For example, Sean said to me, 'Fuck the formal process.' He says, 'I'm gonna do everything I can to...shortcut this and shortcut that.' He says, 'Who cares?' And, in fact the rumors I've heard on the last project he worked on, he basically didn't even come to work, he just worked on it at home, and hired a bunch of contractors and did it on his own without talking to anybody about it because he just wasn't about to figure out the process. He was just gonna figure out his own. And if they didn't like, well then, too bad.

It is important to note that only those who are "stellar" and have highly regarded skills and abilities are "allowed" to buck the system. Although, their working around it and doing things in non-prescribed ways is not officially condoned, it is generally ignored if it is within tolerable limits. The folk hero status conferred on such renegades derives as much from the fact that they are allowed a special dispensation because of their positive contribution as it does from their bravado and risk-taking at bucking the system.

The fact that such behavior is permitted reinforces the belief that getting a successful project out the door is what really counts, and how you got there is far less important. If you stayed right on budget, processed all financial

documentation properly, had every detail delivered on time and on budget, but the course received a dismal reception from its audience, your reputation and status in the culture would be far lower than if you came in over budget, weren't well-organized, had to "slip" your deadline/delivery date, but the course was a smashing success. This fact of life in the culture causes many people to deprioritize learning about and spending time on moving projects through the system unless such tasks bear upon the success of the course.

Those aspiring to management positions need to display much more reverence for the processes and procedures and, if they break or bend the rules, need to do so in a much more covert way. Since management is responsible for upholding such processes, those who want to be viewed as potential members of the management culture need to display similar values, attitudes, and behaviors. Black & whites and others who have no aspirations to management have little reason to follow bureaucratic policies, procedures, and guidelines which seem to be obstacles in the path of getting their projects completed successfully.

3. Through Reading and Other Media

I noticed that one of the primary characteristics that tended to differentiate black & whites from others was that they would prioritize learning about technology above other things "on their list." Don described the way he stays current through reading. Whenever he has spare time at work, he "fills in the gaps" by reading technical journals.

I just picked up a magazine while I was waiting for the meeting and learned about something called ModWorks. I never even heard of ModWorks before, didn't know it existed. It's a large network. There's a lot of them. Didn't know. So all I was doing was scanning that article for the specific key items about ModWorks that differentiate it from what I already know. But I was able to extrapolate from what I already know. And now I know about ModWorks, or enough to understand. Because all I'd done was learn the differences, you know, the little deltas...I've been in engineering since 1970. So it's extensions of stuff I already knew. It's just applications of certain kinds of technology. So it's easy to bridge that gap, to learn the little deltas, to learn how it was applied.

Jean O'Donnell is a course developer in a gray group who has much in common with the black & whites in that she enjoys learning about technology and makes it a priority both at work and outside of work. One of the ways she does this is by reading technical journals. She has a great deal of technical expertise in her area and is, in many ways, a black & white working in a gray group. Her technical expertise earns her a great deal of respect from her gray peers, and enables her to interact comfortably with the black & whites, thereby learning more technical information through those interactions.

Sometimes when I come in in the morning, I may sit there, when I pick up my mail. I may sit there and read the Computer Technology Report right then and there, or a lot of times there are other things to do. But I'm not the most organized person in the way I do my work...So, if I feel like reading that at 10 o'clock in the morning, I'll read it. But very often it's something I do after 5 o'clock. Often I read it in the office though. But I carry a pile of things around with me so if I have to wait in line somewhere, or if I'm at the hairdressers, I usually have something. I remember a couple of years ago, I had to go to the doctor's office often...and I always sat there and read Just Technical Marketing Bulletins. I have this picture in my head of sitting in the doctor's office with nothing on reading Technical Marketing Bulletins.

4. Through Apprenticeship

I found very few instances of true apprenticeship in this culture. The dictionary (Boyer, et al., 1983) defines apprentice as "one who is learning a trade under a skilled craftsman." The primary reason that one finds very few instances of true apprenticeship is that the culture in this workplace does not have a recognized, formal place for individuals who come to work and yet still need to learn. The implicit contract or assumption upon hiring employees is that they have already learned what they need to know to do the job. Although, as this study shows, this assumption is incorrect and many employees don't know what they need to know to do their jobs, the demands of producing – earning one's keep – always take precedence over learning. By contrast, in an apprenticeship, the period of apprenticeship is based on the assumption that the novice's learning the trade or art will take precedence over producing. Once the apprenticeship period is over, production will take

precedence. In an apprenticeship culture, there is a belief that the investment made in teaching a novice will pay off in the long run.

In the culture of the training department, Just as a whole, and, I would venture to say, most contemporary high tech companies, producing takes precedence over learning, from the beginning. However, often employees are given less demanding, less important, and less costly-to-the-company job assignments during the early period of their careers so that they can learn the ropes. Sometimes they are partnered with a more experienced peer, but frequently there is too much work to support such a tandem-learning system.

Following a re-organization and change in job definition, which took place during this study, many employees expressed feelings of frustration and anxiety at the prospect of being expected to adjust and learn the new requirements while continuing to meet aggressive deadlines. In a series of informal brown bag lunches in which employees talked about their jobs and "what success looks like," the majority expressed the belief that, due to frequent reorganizations and changes in the ways jobs were defined, they didn't feel their talents and abilities were aligned with their jobs. They expressed a desire for an apprenticeship system in which they could work in partnership with a colleague who was experienced and skilled at the job. Many said they would be willing to accept both decreased status and decreased salary in return for the opportunity to really learn what they needed to know, on-the-job, from someone whom they respected as an accomplished performer. Nothing ever came of this recommendation for three main reasons. First of all, even as it was being proposed, employees acknowledged that it was unrealistic because there were too many projects to afford the luxury of a "master" and apprentice on each, and secondly, that there were too few, if any, "masters." Finally, even before an attempt was made to devise a strategy for trying to overcome the first two obstacles, another major reorganization took place.

In the area of administrative personnel, apprenticeship is more common. There were quite a few instances in which new, especially temporary, administrative assistants were partnered with more experienced administrative assistants, training coordinators, or with course developers.

In these instances the temps or novices became a combination of gophers, typists, and general assistants. In this capacity, they performed the more routine, low risk functions, and their work was monitored closely. However, in exchange for playing the role of low-person-on-the-totem-pole, they were given the opportunity to learn the ropes and, in fact, apprentice to the more experienced peer for whom they were working. Those who had been in such positions invariably found them extremely valuable and were grateful for the opportunity to learn "under someone who knew more." Again, they learned not only what to do, but they often learned what not to do by living through mistakes and failures and their consequences. In either case, being an apprentice afforded them the opportunity to learn from a more experienced member of the culture without having to shoulder the responsibility for the project or task. In addition, these apprentice periods allowed those in positions of power to look over new hires or temporaries and assess their abilities.

In the case of temporary workers this period of apprenticeship often served as their audition for a permanent job or for future temporary assignments. Again, the office grapevine was quick to pick-up the reputation of the new, auditioning employee. From, "total loser," to "stellar," to "thorough, but very slow," to "space cadet," the members of the training department were quick to rate potential co-workers. Those who were viewed as meeting the cultural requirements: fast and productive and needing a minimum of hand-holding were usually kept employed through contract work and frequently recruited for permanent positions as soon as such positions became available. In fact, it was generally agreed that the best strategy for getting hired at Just was to become a contract/temporary employee or summer intern (a summer internship program available through university recruitment). The laws of supply and demand make getting hired at Just very difficult. Those seeking to "get in" and employees who wanted to help them get in (usually those for whom they had worked and who knew and valued their capabilities), spent time determining the best strategies for getting in. This well-known difficulty of getting hired at Just is another factor which causes employees to feel the pressure of performing well enough to justify their having been chosen.

There were two cases of apprenticeship that I observed at Just. These were ongoing relationships in which one person learned a great deal by receiving teaching and working alongside a more experienced and capable colleague. These two examples of apprenticeship are significant in that they illustrate the powerful cultural and personal forces that come into play in an apprenticeship relationship. In an environment where people tend to be running as fast as they can to meet the demands of their own jobs, and feel unsure about whether they are performing well, it is unusual to find an ongoing relationship in which the apprentice and teacher both choose to make the time for the learning interaction *and* that the teacher has enough confidence in his or her skill and ability to take on a mentor/master role with the apprentice. The mentor must also feel confident enough that the apprentice will not surpass him or her, or be willing to accept that as a possible consequence. In a culture where there is stiff competition for advancement, helping another may, in the long run, mean that the individual being helped becomes a contender, and perhaps a winner, in a future competition. Finally, in a culture where being fast and productive with a minimum of hand-holding is valued, apprenticeship, at first glance, appears to fly in the face of the prevailing value system. It takes time, it slows down productivity, and it requires hand-holding.

However, on second glance, in the cases where apprenticeship and other forms of teaching take place, they can fit in with the cultural values, especially when they fit in with personal agendas. For in spite of the pressures of time and getting projects out the door, and in spite of the threat of competition, many employees feel that building relationships at work contributes greatly to their personal sense of satisfaction. When they are in a position to help others, they derive satisfaction from doing so. Theresa Melton, who has the experience and confidence that make her a potentially valuable teacher/mentor, expressed a sentiment with which many others agreed. When I asked her how she decides who she teachers, or takes under her wing, she said,

Part of it is observation. Part of it is situational, where I'll see something that's gone on and I have this need to give someone feedback on it and give them a perspective. Part of it is that

somebody that is struggling, I want to help. I'm a nurturing person. So a lot of the people that I coach are not the strongest. They're not the strongest that I want to share with. The other part of it is—and it's for your ego as well—I think that I made close friends with Amy and Tracy right away, when I was there, to help. But I also wanted to nurture them because they were bright, capable young ladies and there's still that teacher in me that you can mold some of these people. You can influence them. So I do look for people—I think if there's any subconscious activity going on, it's for people that you think you can make a difference with.

A more subtle aspect of the apprenticeship relationship involves an unwritten contract or tacit obligation: those who are chosen as apprentices are those who "pay back." They pay back in several ways. Those who are involved in apprenticeships or who regularly get coaching from other employees demonstrate certain common characteristics which serve to pay back both the mentor and the organization:

1. They show themselves to be quick studies. They are people who "get it" and get it quickly. They are, therefore, more likely to be deemed worth the investment. If learners demonstrate that they are quick studies, then teachers are more likely to be disposed to teaching them again in the future.
2. They are willing to "repay." This step may be optional for a single teaching and learning episode, but if the learner would like the benefit of ongoing teaching-learning interactions, it may be necessary. "Repayment" can take several forms:
 - a. Giving the teacher satisfaction by simply appreciating him or her. This form of repayment is particularly important in cases where building satisfying relationships is part of the mentor's personal agenda.
 - b. They "make the mentor look good." Sometimes this takes the form of doing work for which only the mentor gets credit. Sometimes this means representing the mentor in a highly positive way.

- c. Implementing what the teacher has taught. Demonstrating that the teaching was valued and utilized. Giving public credit to the teacher or acknowledging to others that the teacher was a contributor to the project may be part of this.
- d. Helping out the teacher when he or she needs some help.
- e. Producing good work, so that the teacher's reputation is enhanced rather than tarnished by the association.

The Amy - Doreen Apprenticeship

When Amy was first hired at Just she was twenty-one years old, had an associate's degree in art and began working as an entry level receptionist. Doreen, a highly capable and experienced administrative assistant happened to have her cube on the other side of the wall from Amy's reception desk. As Amy says in describing how they were attracted to one another,

She heard me. She heard the way I handled irate customers. She said to herself this is not the average bear. And I heard her and knew she was really something, so when an opening came up [under her] she said, "This is the cookie I want," cause she knew I'd come cheap and I'd work my butt off.

In describing how their apprenticeship worked, Amy said,

I didn't anticipate that she'd have as much time as she did [to teach me] and give me sensitivities and innuendos and fine tune things that she did. I was expecting to learn the nuts, and bolts and she gave me everything. We spent a lot of time, just talking and she gave me a lot. I expected I would get some of those subtle issues, [but she gave me] significantly more than what I anticipated, and more than I knew of. I didn't even know how to think that way. You're talking about someone with almost no business experience. And just that kind of business savvy, that's what I was getting that I didn't expect. Catherine really kicked in with the political things, but Doreen had me primed. She did a lot of brushing.

I wanted to get Doreen's point of view on the apprenticeship experience. I conducted a lengthy interview with her. In the interview, she was especially interested in articulating the older person's point of view. As someone over

sixty, Doreen is in a very small minority at Just. She also is in a different position from many other employees in that she owned her own small business before coming to Just. From her first days at Just ten years ago, her capability and maturity were clear to those around her. She took on the role of senior administrative assistant extraordinaire and mother hen to most of the department, including the director at the time. Doreen did not come to the training department with an agenda based on climbing the ladder or achieving particular professional goals. She sought satisfaction from her job based on her ability to contribute to others. At this stage in her life, Doreen is thinking about retirement and has a special interest in pursuing a "retirement career" as a freelance editor. She has frequently been told she has a talent for writing and would like to work with words. After my interview with Doreen, I asked her if she would want to write something about her experience as a mentor to Amy. Rather than edit it, I provide the entire narrative that Doreen wrote.

Training of administrative personnel is a high priority at Just, since this support strata has responsibility for time-consuming tasks that get projects "through the system." It is essential that this staff is knowledgeable about standard "business papers" (financial tools, purchase orders, check requests, contract forms) and efficient in monitoring managerial "clocks and calendars."

Since the essential functions of administrative assistants (secretaries, in other corporations) and coordinators, are valued at Just Training, these populations are among the most skilled and enjoy the most personal satisfaction of all the administrative support staff at Just Computers.

I chose Amy for a training program because most of all, it would be efficient use of my time.

I had to train SOMEONE to replace me during my six-week sabbatical. The department could not spare any other experienced associate to dedicate to me. My primary option was to hire an agency "temp," undergo multiple interviews, and lose precious time if there were any "false starts" due to disappointing performance.

To further complicate the process, I was administrator to the department head, and it was essential that I establish a smooth transition process for my absence. I felt it was a requirement of my job to choose a capable successor who would not "skip a beat" while I was gone. My ability to identify such a person was more important to me than the "risk" of being "outshadowed" by my replacement.

Amy, despite her youth and lack of business experience, presented fewer unknowns than a credentialed "temp." The proximity of my office to her reception station allowed me to hear and see her "in action." Many qualities were almost immediately apparent. She had excellent communication skills, legible handwriting, was able to capture important detail in her message taking, was friendly, helpful, and seized every opportunity to "go beyond." It could take six months to determine the appearance of those skills in another person. AND she was familiar with many of the standard business papers, had an awareness of just organizational hierarchy.

Amy would be highly motivated to success. This would be a unique opportunity for her. Having worked with me and assumed my responsibilities for six weeks, her prospective value to the department in some future employment opportunity would be extremely visible. She could not lose. I would ensure that she not fail.

During training and in my replacement, she performed exactly as "my gut" told me she would--and more! Her native skills were quite remarkable. She was the proverbial sponge, soaking up every nuance, eager to learn and excel.

I believe that a special ingredient fostered the best aspects of this trainer-learner situation. For me, there was a strong "parental" aspect from which I derived a high degree of personal satisfaction. As a mother of mature daughters, I had already experienced the "storming of the Bastille." I had only a small amount of "ego" to lose to a "younger woman." Being a champion was more important to me than being supplanted. There is a great amount of pride in watering a lovely plant and ensuring its survival. You can take no responsibility for the beauty of the flower--that is innate. But you know that you have supplied the nutrient which allows the growth.

This special relationship has persisted with Amy and me. Even though she has long "outgrown" me, we share the remembrance

of the beginning and the pain of having to "leave home." The "return visits" are always filled with mutual respect and pride.

During my ten years with Just Training, I have been called upon again and again to train administrative staff. Rarely has there been such reward. Oh, the job has been done all right, but some ingredient or another has been missing, personalities have not completely meshed, personal satisfaction has not been high.

I think the following are important to ensure learning success in a common work environment:

1. High motivation to learn from a specific teacher.
2. Something in it for the trainer--preferably making your own work easier. (A highly qualified co-worker enhances everyone's project investment.)
3. A "quick study" learner to minimize training time.
4. A good formula for dealing with egos--possible loss for the trainer, enhancement for the learner. The trainer needs to feel extremely secure--either in the job or on the personal level.

Amy is an interesting apprentice to study because she apprenticed with two of the most accomplished and respected individuals in the training department. When I asked her why she thought she was chosen, she said,

In both cases, [with Catherine and Doreen] our styles are very similar. The desire to clone yourself, I think it impacts the kind of person you would choose as an apprentice, when you look at the delta between them and you. I got promoted to an AA c [the entry level administrative assistant position] at the time [I started to work for Doreen], and at the time, it was as far as as I could see to be a mini Doreen. I'm sensitive when people have said the mini Doreen and the mini Catherine, cause there's a lot that I am that they brought out. I'd say I'm not a mini Doreen. I can't help it that I happen to be a lot like Doreen. I learned what I wanted to learn and there's a lot that I've thrown back. I'm significantly more open and self-revelatory than she is. She has told me straight out to be less open, she's said you'll get burned a few times and you'll learn.

When Amy moved from her receptionist position to her new position, a promotion to the lowest rung on the administrative assistant ladder, she

began her apprenticeship with Doreen. About a year later, she had learned a great deal as an administrative assistant and went to work for Catherine who, at first was a course developer and later was promoted to manager. Amy was Catherine's administrative assistant and apprentice in both of those capacities. In contrasting the two apprenticeships Amy said,

With Doreen the work we were doing was similar and she was training me as we were working...The Doreen apprenticeship was much more apparent. We worked right together. You've got this totally green person working with this person who was totally experienced, and pretty soon one started talking and acting like the other. Part of it is just that I am that way. I'm very direct. With Catherine, it was more since she was actually my manager, she wasn't training me to do her job. She was teaching me to do things her way and modelling it for me, whatever it might be – from style, verbal, in writing, over the phone, political subtleties where she would say, "Oh by the way. da da da." Doreen was more telling me what to do, part of her job was to teach me, and Doreen taught me this is how you should do this. With Catherine, it was more that I chose. I decided to model the behavior that I saw. Some things we spoke about. Some was under the surface. With Doreen there were things I chose to emulate that she was not required to teach me, but the percentages flip flop. With Doreen, it was probably 70% what she was teaching and 30% what I decided to model. With Catherine, 40% was what she decided to teach me. Subtly she was trying to teach me. There was a message that you should do it [like me]. Stylistically there were things I decided I wanted to follow.

It's important to note that the term apprenticeship is not used in the culture. Amy and others I talked with picked up and used the term in our talks, but it is not one that is generally used because the role doesn't exist widely. I shared with Amy the list above on ways that apprentices repay. She agreed with the items on the list and added,

The biggest thing that's in it for you [if you're the mentor] is [the apprentice] not questioning what they say, doing just what they tell you to do and [the apprentice] does good quality work. The apprentice doesn't want to put their personal stamp on things. When I did things for Catherine, they looked just like she had done it. It looked personal, just like she had done it. What I was

paying back was making this person look as good as I possibly could. I gave credit right back. And I think that makes for a lot of trust. You feel like they're not out for their own gain. Of course I'm out for my own gain [the apprentice's], but I'm also really interested in the common good. When I've had people work for me and I've felt that, that's made a big difference.

Amy also added that, "Doreen has said how satisfying it is to see people grow and develop and see them go from A to M and say, 'Hey they might not have gone there if not for me.'"

Since the rules for "making it" are never explicitly articulated, and it is often difficult to discern what the criteria for advancement or developing a "stellar" reputation are, individuals who seem to have figured it out, are often discussed. Others speculate on their strategies and methods. Such folklore becomes part of the culture. Whether these stories are true or not is less important than the fact that they communicate the values and folk theories of making it to those who aspire to make it in the culture.

The Amy-Catherine Apprenticeship

Catherine Pierce is one of the superstars of the training department. Probably more than any other employee, she is viewed as exemplifying success. She has a reputation for being an outstanding performer, and she has reaped the rewards that the system has to offer. There is a great deal of folklore about Catherine. It appears to be a classic case of folklore serving the purpose of enabling other employees to extrapolate a folk theory of success. According to the folklore, Catherine is young (30 or younger). While there is much speculation, no one seems knows her exact age. She has less formal education than most Just employees. The speculation is that she has one semester of college, but, again, no one seems to know for sure. She began her career at Just as an administrative assistant, although few people know who she worked for or how she learned what she needed to know to perform so outstandingly and advance so rapidly. However, after eight years at Just, Catherine has worked her way up the corporate ladder and is a second level manager. She manages three other managers and their groups and has a total of 30 people reporting to her, most of them older and with more education.

Catherine serves as a folk hero because she "made it" on her tremendous dedication, hard work, and intelligence. Her success offers others the hope that if they work hard enough and bring enough to the party, they too can make it. Her story suggests that age and education are less important than hard work and talent. It also suggests that learning what it takes to succeed is a mysterious process. People often speculate about how she "learned all that stuff," and "how she got so good."

When Catherine was an individual contributor, working as a course developer, she had taken on so much responsibility that she needed an assistant. Amy was the group's administrative assistant at the time and Catherine took her on as an assistant. Amy was a few years younger than Catherine, relatively new to the company and to the world of high tech, ambitious, intelligent, and hard working. She had learned the ropes from Doreen and having "attended the Doreen school" and gotten high marks, she was labeled a winner: fast and productive and needing a minimum of hand-holding. Like Catherine, she also had relatively little formal education compared to others at Just, an associate's degree in art from a community college. She was eager for the opportunity to be the assistant to the department superstar. And as Amy herself noted earlier, they had similar personality types: driving, ambitious, quick-studies, who appreciated the value of outstanding on-the-job performance. Thus began the apprenticeship.

Both Amy and Catherine worked long hours, many nights till 10 p.m. or later. Catherine organized, planned, and managed the projects, and Amy took on the tasks she assigned. Catherine was always "out in front," the person associated with the projects and successes, but Amy contributed a great deal in the execution and implementation of Catherine's projects. Amy did get recognition for being a "stellar" AA and the status of being Catherine's assistant. She also knew that she was getting the invaluable experience of learning from a master.

During this time Catherine and Amy became friends, although, from Amy's point of view, even in the friendship Catherine was "the one up here." Catherine modelled and sometimes gave Amy coaching on how to dress,

how to communicate, and generally how to be successful. When I asked Amy how she learned from Catherine, she said,

The amount of time I spent with Doreen was compact. We were in the same cube. With Catherine, it was more extended. I could notice patterns. I could see why she did that, because, here's a really small example. She was extremely polite and courteous, just nice and personally interested with people of all levels, showed no discrimination with people of all levels, from the box boy to her manager. I noticed that about her right away because that's not how it is with everyone. She was always real friendly, and how I noticed that paying off for her was that a lot of times it's the little people you need who pay off for you. Like when you're up against the deadlines, you know the guys in shipping and you know the AA and they'll make special arrangements for you. And she never said to me, you know you would probably find it beneficial to be very courteous with people on the phone, knowing that everybody can help you, but I saw those pay off for her time and time again. We've talked about how everybody likes her.

Amy gave everything she had to helping Catherine to be successful and learned all she could in the process. She learned the lessons well and trusted that when Catherine was in a position to promote her, she would – not as a political thank-you, but because Catherine knew Amy's capabilities and knew she would be successful doing the job that Catherine had taught her so well.

When Catherine was promoted to manager of the group in which she had worked as a course developer, she promoted Amy to the position of team coordinator, one step above an administrative assistant. Amy worked hard in this position, seeking to be the best training coordinator she could be and keeping her eye on the next promotion, the one she really wanted – course developer. Course developer was the position for which she had apprenticed. She felt confident that she could do the job. After Catherine was promoted she worked with numerous other course developers and assisted them. She could see that many of them lacked the degree of administrative, financial, and project management skills she had. She also realized that they had skills and knowledge in instructional design and course development that she didn't have, skills and knowledge they had, for the most part, acquired

through formal education. Amy, and most of the other course developers who worked with her, believed that she could take classes, read books, or get coaching from those with expertise to develop the skills she lacked. She felt confident she could do the job. She thought Catherine ought to realize that she could do the job. For about a year, she worked hard to prove that she deserved to be promoted to be a course developer. Then came the bad news.

Catherine had pursued the issue with the managers above her and with the human resource specialists who determine the qualifications needed for each position. Catherine told Amy that they had all agreed that the current requirements of the job called for individuals who had a college degree, preferably a master's degree, in instructional design, education, or a related area, preferably with job experience in the field prior to coming to Just. Amy could not be considered as a candidate. Amy pursued the idea of creating a special junior level position or one which called only for the project management skills she had. Catherine turned down the idea. Amy speculated on the reasons why,

I still think Catherine would not be inclined to hire a project specialist, because she wants the people that are here to be totally stellar and able to do everything. She doesn't want to be limited by having to allocate her resources based on skill. So, if she needs somebody to do project management, she wants to be able to pick from anybody, and if she needs someone to do design, she wants to be able to pick from anybody....So I think she'd be real hesitant to bring somebody like myself on who'd be extremely weak in the design area and need a lot of work there, because everybody that Catherine hires is, of course, a star...I'm not gonna be able to walk in there and be a course developer of the century. Therefore, I'm not material for Catherine's group, in that mode. I can be the TC of the century, but I'll still have to stay where I'm at.

Amy feels that because she would need time, experience, and training, she isn't being considered for the course developer position. She articulates a folk theory of making it that many others have articulated as well. If you can't be "stellar," the employee "of the century" from day one, then you're not "material" for the training department--you don't have the right stuff. Learning mode is not acceptable.

Both Amy and Catherine knew that Catherine's success had been possible because when she advanced, formal educational requirements didn't exist. A window of opportunity had closed. Catherine had gotten in before it closed, and Amy was left out. Amy's apprenticeship with Catherine didn't compensate. The two years of long hours and hard work had taught Amy a great deal, but she wouldn't be able to get the big pay-off, the chance to graduate from apprentice to course developer. She has reached a job ceiling based upon her lack of formal education. Amy is unwilling to go back to school to get the appropriate degree. As she says, it's partly stubbornness and partly working at a full-time job and being a young wife who is now looking forward to starting a family, she just doesn't feel willing to make the commitment to going to school at night, especially since completing the degree would take about six years on a part-time basis.

Amy has adapted to her situation in a way that I have seen others in the training department adapt when they discover they have either hit a job ceiling or when, due to a reorganization or changed job description, feel that the work they are doing is no longer challenging, interesting, or to their liking – and particularly when they feel powerless over the circumstances. In these situations often morale, dedication, productivity, and interest in learning and performing with excellence diminish. They frequently decide to treat their job like a job instead of a personal commitment from which they derive deep personal satisfaction. They say things like, "I used to love my job, it used to be great, but now it's a paycheck. I'll do what I'm getting paid to do, but I'll be out the door at 5 or 6, no extra hours, no weekends." And as Amy often says now, "I don't do the extras any more. There are a lot of things I could be doing, but now I 'Just Say No.'" When Catherine told Amy that another TC, Terri Lettersen, would be joining the group and that, "Terri'll give you [Amy] a run for your money, that's for sure." Amy responded by saying,

I ain't gonna race Terri for nothing. If she wants to run, then she's running a solo race because I'm not gonna do that. And if the group wants to think that Terri's the best TC in the group, and Amy's good, but Terri's better, I don't have a problem with

that. I'm not gonna stay here till 12 o'clock at night to be the best...I think I gave that one up a long time ago.

An interesting consequence of Amy's diminished commitment is that some of her peers have recent records of outstanding commitment and performance and have developed reputations that surpass hers. A new position called Implementation Specialist was created in one of the department's recent reorganizations. The job description for this position calls for an individual with the administrative, project management and communications skills that Amy has demonstrated, but does not require the kinds of instructional design skills she lacks. It presented an ideal opportunity for her to achieve the advancement she wanted so much. Several other employees in the training department in similar situations to Amy, ready to accept increased job responsibility and looking for opportunities, eagerly applied for the new positions. I talked to Amy the day that she learned that one of her peers had been a finalist and she was not.

I remember that I had to be quiet because I was actually feeling, like, a lump in my throat about the Kimberly thing...Oh, I thought she would be a strong candidate. It's just, that -- you know what the bottom line is for me in this one? Well, there's several things. But one of them is...that I feel like if Kimberly and I have a fairly equitable skill set -- which I would say we probably do...that the person who's been in the department working their butt off for four years should take priority over the person who's been in the department working their butt off for one year.

Amy has an image of herself as "working her butt off," when in fact she has made a conscious decision to be less committed to work, and she has talked openly with her friends and colleagues about that choice. It's difficult for her to reconcile the fact that the adaptation she made when she felt there were no advancement opportunities has hurt her now that one has unexpectedly occurred. Kimberly, who is newer and still believes that working the extra long hours and going the extra mile -- "working her butt off" -- will pay off, has been a stellar performer during a time when Amy has chosen not to be. Kimberly has benefitted from believing in and acting in accordance with a folk model of success that Amy's experience led her to reject.

Much of the reason that the events in Amy's career have been difficult and painful hark back to her apprenticeship experience. She still frequently asserts her belief that she's "as good, or almost as good as" Catherine. She apprenticed with the department superstar and she paid her dues by being willing to work diligently in the background while someone else got the spotlight. She expected one day to follow in the footsteps of her mentor. Being told by that mentor on numerous occasions, "there's no chance...it's not gonna happen," has been a bitter pill for Amy to take. It has also had direct implications on what she has learned. When advancement served as a motivator, Amy was very effective at learning what she needed to know and making good use of the available learning opportunities. Without the motivation of advancement, which for her personally, is at the core of her personal agenda, she finds little reason to invest the extra time and energy to learn, develop, and be "stellar." Amy's final comment in our discussion about her not getting the promotion she wanted was,

So, my esteem's kind of suffering a little bit. That's just – that's the nature of the beast. Catherine was saying to me about that, she said, "Just don't take it personally. This is not a personal thing." And I said, "How can it not be a personal thing? What's not personal about it?"

Amy's personal agenda and her advancement at work are deeply meshed. The mini-lesson above that her former mentor tries to impart to her is one she cannot learn. To learn it would be to detach from the very motivations that enable her to learn, find meaning, and contribute to the culture.

5. By Getting Coaching or Teaching

Employees can get coaching and teaching from more skilled peers who are just employees, contract employees or vendors. When I asked course developers or other specialists whether they had gotten coaching or teaching from others at Just, they generally said no. Many employees expressed the idea that they had been "drop[p]ed into boiling water" or that they were expected "to sink or swim." Upon further discussion and through observation of the interactions employees engaged in, it became clear that

employees do help, teach, and coach one another. And they frequently find a friend with more experience who becomes a resource, someone they can ask questions of, or they find a circle of respected and trusted colleagues of whom they can ask questions. However, the impression that they don't get coaching or teaching is an important one. It grows out of the prevailing feeling that they are on their own to sink or swim. The teaching and coaching that is available does not provide security and does not provide new or developing employees with the sense that a coach or teacher is available to provide scaffolding, modeling, and teaching on an ongoing basis throughout the process of working on a project. The nature of the coaching and teaching is sporadic, uncertain, and at arm's length. In other words, the learner may or may not be able to find someone who can teach what he or she needs to know. The availability of teachers is contingent upon the demands of their own projects and their willingness to take time to teach and coach. And perhaps most salient of all in accounting for the prevailing feeling that "you've been dropped into boiling water," is the belief that, whether you learn or not and whether you succeed or not, you are in it alone. There is no mentor, coach, or organizational support to share responsibility for an individual's workload and success. It is the individual employee who sinks or swims.

When I asked Beth Whitney whom she tends to ask when she doesn't know how to do part of her job, she said,

Anybody who has been involved with it before or anybody that has been around long enough to have seen it done. People who I guess I respect that they know what they're doing and that they wouldn't steer me wrong. Those are the kinds of people that I would ask how to do something, or what their opinion is on something.

When I asked Mathew Field how he learned to do his job, he said,

Talk to people. I worked with Nathan on the project that he was working on last spring and kind of followed him around and saw what went on there. That was really worthwhile. He's really good to work with. And he wasn't trying to hold back anything, so that was a good idea. As far as, for example, doing a

design plan, you know, I just got copies of design plans, looked at them and then wrote my own.

I then asked Mathew if he continued to use Nathan as a resource.

Mathew: Yea. Nathan and Roger, yea.

SR: How did you pick them?

Mathew: [laughs] They were the friendliest people around...we go out to lunch all the time you know, we've become friends, even outside of work so that's worked out really well. And they're very approachable, unlike the people in the technical training group who are sort of like, "leave me alone."

SR: Do you feel that way about Don too?

N: He's a nice guy, I just get the feeling that if I walked into his office I'd be disturbing him.

Jean O'Donnell captured a common thread in describing how she learned when she was new to Just, and how she continues to learn.

Then, when I was on the job, I stayed late in the evenings. I had some tasks to finish up from my last job, but they involved word processing, so I did them on the Just computer and that was giving me more practice on learning how to do it. So I sort of found opportunities to learn the stuff. And the system software stuff, I didn't understand that right away, but I knew I sort of had to understand it to do the job. So I asked a lot of questions of people till I would get it. I found Barry White, he was one of the people who I worked with a lot. He told me a lot of stuff. The problem with Barry is, that when you asked him something or what it was about, he would just do it for you, rather than helping you understand it, so I found that I didn't learn very much from him, but I found that when I could ask him questions and, I think that's how I learn things a lot is just kind of buggin' people.

While "just kind of buggin' people" is a common way to learn, it has certain drawbacks for some learners: (a) it presumes that the learner and teacher have good interpersonal skills – that the learner feels comfortable asking and that, unlike Barry White, the teacher or more skilled peer is an effective

teacher; (b) since asking questions reveals one's areas of weakness, in this culture, it's risky to admit one doesn't know things. The office grapevine is full of tales of dumb questions asked or comments like, "it was clear from the questions he was asking that he didn't know the first thing about Wizardry." Again, asking questions generally requires that the learner have a high degree of trust in the potential teacher's willingness not to tell anyone if you've asked a question that reveals ignorance in an area one is expected to know. And asking questions also generally requires that the one asking believe that his or her areas of competence are strong enough that an entire reputation won't be shattered by revealing what one still needs to learn; (c) it presumes that a competent teacher is available and that (d) such a teacher is willing and able to make time in a busy schedule to teach the less skilled colleague.

Teaching and Learning Occur Along the Pathways of Social Interaction

It was clear that teaching and learning occurred along the lines of social interaction. If people were friends or had worked together on projects, and had established mutual respect and friendship, the established relationship became a pathway along which teaching and learning could occur. Competent teachers who were not already part of one's social network were rarely tapped as resources by employees who needed to learn a new task or skill.

Theresa Melton makes an interesting observation about the social networks and the status systems within them.

But I see, too, that this is a very cliquish company and a very cliquish environment and within the training department that was true as well. You kind of had to muzzle your way in. The first few months are very unhappy for people that are new into the organization. As sweet as a lot of people there are, it's really hard when you have a tight-knit group. Who has pizza in Jean's cube at 11:00 at night? You know what I mean? You gotta be the right folks to get invited. Who would even consider inviting you to lunch the first three or four months on the job? People don't do that. And I think part of it is this thing that they don't extend themselves in a lot of ways.

Because people don't always extend themselves, it is difficult to "muzzle" one's way into the social networks that could lead to needed learning opportunities. Theresa further describes her early days at Just, when learning opportunities were difficult to find,

What I found at Just is that you have to make your own way... you have to find your successes, build those relationships. I care a lot about relationships, and that's part of what I try to work on to be part of the successes...To find some key people that could provide me with information that I could talk to that would give me perspective. And it was hard for me to do that, I didn't look in all the right places in the beginning. I think that's the other thing with people there, they don't know [who to ask].

Theresa went on to discuss a situation in which she was working with Martha VanWycke, a colleague, on a project. She was unaware that Martha who was new and overwhelmed, didn't know what to ask.

When I first started working with Martha VanWycke, as an example, extremely bright young lady with a lot of talent. She's very, very good. She was so overwhelmed by the pace and by the environment, she didn't even know what to ask that would have helped her do what she needed to do.

Furthermore, in Martha's eyes, she and Theresa had not established the prerequisite trust, so that asking presented too high of a risk.

I'm guilty of this and I acknowledge this, that it actually took kind of a blowup for us to come to awareness with each other--I had so much to deal with, and I was so focused on making it happen, and making the corrections and the amendments...so I had to deal with that whole relationship concurrently with learning to deal with Just, concurrently to learning a lot of things, and I missed some of her signals, which I probably will always beat myself up for because I really try to be in tune to people, but she was a perfect example, in that she was so intimidated by even me. Working with me, because she saw confidence and capability and somebody who would just walk in and see things and turn it over. But she was afraid even to acknowledge to me that she didn't know what to do. And no one ever set it up with her, 'This is how Just does business,' or 'This is what you need to know,' none of that was there for her. She just hit the road running. And it was true for me too. I hit

the road running. I happen to have had a lot more industry experience.

In Theresa's situation, she wanted to be a helpful coach and teacher, but missed the signals that were suggesting that Martha needed help. Normally, Theresa gets a great deal of satisfaction from being in the coaching role and welcomes it. She would have served as a coach and teacher had she caught the signals. This may not have been the case with others.

Learning about the Field through Getting Help from Others

Learning about the field can be done through direct experience or through talking to people in the field to learn their perspective. Calling up someone you don't know, or may have met once, can be difficult. This is where the more social inclination of grays becomes an asset. They find it easier to meet and get to know field people during the infrequent occasions when interaction is possible, and they find it easier to establish or maintain long distance contact through phone or electronic mail.

Almost all course developers are given the objective by their managers of visiting the field. Usually the objective includes attending one or more training classes, so they can see how the courses are delivered by trainers and received by class participants. The kinds of issues that surface and the opportunity to talk with participants and get an understanding of what their jobs are like and what kind of training they need to do their jobs, provides course developers with information that can be critical in developing courses that meet the needs of the audience. Course developers frequently are given the objective of going on sales calls during these field visits. In these sales calls, they accompany a Just sales person in visiting a customer for the purpose of making a sale or following up after a sale has been made. This is another opportunity to see and understand, first-hand, the nature of the work. Course developers usually come away from such visits with a much greater appreciation for the realities of the work of sales and support people in the field. They understand better how training fits into that world and how complex the issues they need to learn about are. They usually understand

much better why, for people in the field, spending time in training classes is an investment of precious time, and why often they don't feel they have received an adequate return on their investment.

Course developers also come to understand trainers better when they spend time with them as they do their jobs. They come to realize that when the courses "miss the target," and the class participants feel frustrated or dissatisfied, the field trainer is the one who "takes the hit." Furthermore, class participants often have difficult, technical questions which they ask the trainer. Trainers are constantly on the spot and either need to invest heavily in their own technical expertise or find alternatives to learning. They face the same kinds of dilemmas and choices as course developers: there simply isn't enough time to do everything and one needs to be creative in finding ways to learn what you can and finesse the rest.

As Pauline Albright, one of the field trainers said,

I learn at the last minute. I put things off until the last minute, then I cram because I have so much to do, I can't learn ahead of time. I'd like to prepare ahead of time, but you saw my calendar. It also depends on how skilled you are at working around things. If I can find a way of not having to be an expert in it, why not take advantage of it? I've had to learn to trust someone else [who is an expert]...that's working smart.

Learning about Technology Through Getting Help from Others

Black & whites seem to resist this method, while grays prefer it. For black & whites, who pride themselves in their ability to figure things out and enjoy doing so, going to others for help is both an admission of failure and the loss of an opportunity to achieve the satisfaction of figuring something out. Sean described why, among black & whites, there is a loss of status involved in asking for help.

As far as fear of not knowing, if there's a fear, it's that the other person has more experience in some area that you don't, or that you may not have. And there's two ways you can get by that. One is just give in and say oh well I don't have that much background in that environment or

in that area and try to learn about it. I would say that only happens about ten per cent of the time. The majority of the time you...just try to compete...with what you've got.

As I spent time with black & whites and observed them learning, I noticed that they did in fact often ask each other questions, but they tended to be specific "how-to-do-something" questions. As Don described it when I asked him if members of his group ask him for help,

They have a lot of strong backgrounds too. I think they can figure it out themselves. So it's - we'll ask each other questions, perhaps, one quick question, give me the answer, and then I'll -because I'm stuck. And that's the situation where, "Okay, I've tried various commands and I still don't know how to tab. How do I do it? Tell me real quick. Thanks." Then we go on. It's that kind of situation.

Mathew Field discussed this topic in somewhat greater depth. In the conversation below he touches on two important concepts. First of all, Mathew notes that, with technical people, just handing them a book or "giving them a few clues," is all it takes to enable them to learn what they need to know. He then comments that almost no one comes over saying, "I don't know anything about this."

Mathew: I know some people from technical backgrounds like to be, quote, gurus. Like, I know this stuff and nobody else does, so everybody, come to me for answers. Whereas, my attitude is, yea, I know a lot of this stuff, but give this person a few clues and then they won't have to bother me with their questions.

SR: Do people in your area (black & white) share information and teach each other things?

Mathew: I would say only a little bit. Every once in awhile someone will come over and go, "You have anything on this?" And I'll hand them a book, cause I've collected books from engineering and stuff like that. But in general there's not a lot of, "I don't know anything about this, can you tell me about this." Cause part of it is that this came up in engineering, we were sitting there saying. Everyone always has questions, but you never know who to go to unless you already know that this person is quote an expert in it...

SR: It seems to me you've made yourself available (as a technical expert!) in a way that seems very approachable. Have you gotten a lot of questions?

Mathew: Yea. Like Kevin O'Connor would come by trying to track down stuff. Cause I've sent out these sort of blanket electronic mail messages, just so people would know I was around. But I don't see it like people going to Tom, or Sean, or Elle, or any [one in the technical group], to ask any questions. I also don't see too many people coming over to the product training people either.

Mathew understands that many people in the training department would like to ask the broad fundamental questions, such as, "I don't know anything about this, can you tell me about this?" But they don't. He has proposed offering technical seminars to them, but nothing has come of the idea.

I personally think that there are people in the training department who purposely avoid technical ability and knowledge, for what I would consider pretty strange reasons. Like, "Oh, I can't understand that." Which, you know, I think is nonsense. There's nothing magical about this stuff. I think some people just (makes gesture indicating make it go away).

Cause I've brought up a couple of times just doing technical seminars for anyone who was interested. Cause we work for a technological company and it seems to make sense that people should at least understand the stuff that Just does. But it's just getting interest in that.

Getting Help from Others Versus the Fear of Looking Stupid

Grays enjoy interaction with people and find it more comfortable to learn about technology when it is explained by someone who knows it and can teach it well. It would seem that the black & whites would be the logical tutors for the grays. Although this happens occasionally, it does not happen as often as one might expect.

One of the fears that almost all members of the department talk about is the fear of looking stupid. Being thought of as stupid does great damage to one's reputation. Standing and status in the culture are based largely on reputation.

Many grays fear that they will ask a black & white a question which turns out to be a very fundamental question, or that in the process of being tutored, they turn out to be slow at "getting it" and then word will get out that they are slow and stupid, and then their reputation will be damaged. These fears are not without foundation. Black & whites sometimes do talk about those who they think are "stupid," those who "just don't get it." Sean told me such a story,

There was a course developer in the training department a couple of years ago that came to me and asked me how to initialize a double-sided diskette, a blank diskette they pulled out of the box. And came to me, I mean I didn't know this person, I still, three years later, don't know this person very well. This person sought me out, seeing me as being a technical person that I would surely know how to do that. And to me it was the *stupidist* [emphasis his], most fundamental thing that anybody that's ever touched a Just computer should be able to figure something like that out. So, because I was sought out as being a technical person, that person viewed that as something that was technical.

Part of the risk and anxiety of asking for help is captured in a story told to me by Mathew Field. Mathew is interested in teaching people about the technology. As mentioned earlier, he feels he would like to offer technical seminars. He has also sent out electronic mail memos inviting people, especially non-technical people, to come talk to him to learn about technical topics. And yet, he told me the following story, a funny story, and a classic piece of black & white folklore. Nevertheless, it is a story which indicates that, perhaps, if one appeared "stupid" with Mathew that stories like the one below would find their way into the department grapevine and one's reputation might be tarnished.

I was working on a project with some engineers. Only a few select people were working on this project. It was both hardware and software. Ralph was the marketing manager for the project [a gray]. And he would get his hands on it, and it wouldn't work. He went through about 10 of 'em. We would crack-up about it.

His first name became a verb for to break something. His name was Ralph and to Ralph or Ralphed meant to break something

or to stop working. The three engineers on the project, we all used it a lot.

Stories such as this are plentiful and they send a mixed message to grays. While many black & whites say they don't view fundamental questions as a sign of stupidity, stories such as those above reveal a tendency to discount and ridicule those with less technical ability. Much of this mixed message comes from the fact that many black & whites get a great deal of satisfaction and social status from teaching others. For grays to feel safe asking for help from a more technical peer, it became clear two prerequisites needed to be met: having a prior working relationship with the potential "tutor" and having earned respect as someone who does bring something valuable to the party, although it may not be technical expertise. In other words, if someone feels that the black & white knows you are not stupid in some areas, you can risk looking stupid in the area of technology. I discussed this with Don after he told me that, in spite of his expertise and eagerness to teach, very few people come to him to ask for help in learning about the technology.

SR: ...well, you seem to me pretty approachable, but

Don: I thought so. I don't think I've bit anybody yet.

SR: ...I think what I've found out so far is that the people that [other] people tend to go to to say, "Hey, I don't understand this, could you explain?" seem to be people in their social network. If you already have an established relationship with someone, then the wheels are sort of greased to ask the question. And to go approach someone who you don't really know -- and even if they seem approachable.

Don: Yea. Like Danielle will come and ask me. But Danielle and I worked on a project, when I first joined the company, together. So I guess she feels like she can approach me. But there's several people I haven't worked with, and I certainly don't see their faces asking me questions.

Jean O'Donnell is one of the most respected course developers. She has been in the training department for longer than most people and comfortably straddles both the black & white and the gray worlds. In discussing this theme, Jean says,

I know that if people come to me and ask me stuff, but somehow I have offered myself up in a way that they feel comfortable asking. It starts with friendship and I think when we find we have some camaraderie about interest in a topic, then I'm more willing to share things with people. I tend to share it with people that I'm put with on teams or on projects or close to in the office. Like they might be across the hall from me, so we joke around and do whatever, and eventually there's some sharing that comes of that. I probably have a tendency to share with people who have things to give to me. Y'know. I learn something from them and then they learn something from me at the same time. A lot of it's not even a conscious decision. I mean, I'm not out to teach people things. But I do offer to teach people things sometimes...I let people know that I'm willing to share what I've got in a way that, for most people, it seems very non-threatening to them.

When I ask her if Violet, a gray course developer who is a member of her team and has been having a difficult time getting up to speed on the technology, has come to her she says,

I think Violet's afraid of me. I think it's ...because I've been set up as an example for her...I've always been uncomfortable with that kind of thing, I mean it's motivating [to me]...and it makes you feel good about yourself when people say, "Here's an example of where you ought to be." But, "Jean knows all this technology. Jean knows how to do these things."...It's like all that brother and sister stuff you go through. It doesn't make you want to go to somebody and ask 'em.

Alicia Fernandez, a gray production coordinator, discusses who she goes to for help on technical matters,

I think it's knowing who to ask and going to your own little subject matter experts. When I think of peers, I don't think of necessarily the person I happen to work with. I think of my subject-matter expert peers, who I feel comfortable asking. Cause I feel comfortable asking Sean Miller, but I certainly don't feel comfortable asking Don Lauritzen, cause I don't know Don Lauritzen. So I can learn better from Sean cause I'm comfortable with him. I'm not afraid to be stupid with him.

Alicia had learned that Sean had trouble figuring out how to calculate the correct tax deductions resulting from a company benefit. She had been having trouble with the same calculation, but was very surprised to discover that Sean, who is "a very matter of fact, technical person" struggled with the same thing.

SR: Did you feel comfortable asking him more things after you knew he had trouble with that?

AF: Yea. [both laugh] I mean, I felt dumb already, but when I realized he had felt dumb too, it made me feel better. I think if you feel like you have company in your ignorance, then you feel much more comfortable. Like, let's go learn together, or I'll let you know when I get the information.

Beth Whitney, an administrative assistant who began taking on the additional job responsibilities of a training coordinator, didn't know how to do one of the important functions in her new job. Because she had never been expected to perform this job function in her role as administrative assistant, there was less risk involved in asking for help. However, many employees still would have been afraid to ask their bosses for coaching. Beth was not afraid and in the following conversation, she reveals why she feels able to enlist her manager as a teacher.

S: But if you take that as an example, the first time somebody said, you're gonna need to do accruals or keep the spreadsheets for this. I don't know if you had ever done it before, I never had. How did you get from, I've never seen a spreadsheet before to oh now I know how to do that; I understand that now?

B: How did I do that? I think I'm a pretty quick learner and I watch people a lot. I think that's the way I've learned the most around here is just by watching other people. And then, finally, I said, "I have no idea what this is, I don't know what you're talking about." So Andrew said, "You should go take a business course." [laughs]

S: Was that hard to say? For you to say to him, "I don't understand it."

B: No. That wasn't hard.

S: You didn't worry that he'll think, "Oh no, she's"

B: No. I kind of play this one up a little bit. I'm the youngest person in the department and I also think that I kind of surprised him at what I've been able to learn, so I kind of use that to my advantage. So, I don't know anything about this, but in four months I'll probably be pretty proficient at it. So explain to me what you need me to do. So I'm not too afraid to say I don't know this because probably in about four, this probably sounds arrogant, but probably in about four months I'll know what I'm doing, then I can do it.

While some employees like Beth and Alicia have confidence in their ability to learn quickly and bring a good return on investments made in teaching them, other employees are afraid to reveal what they do not know. Over and over again, employees talked to me about their fear that if they revealed not knowing certain things, they would be labelled "dumb," "stupid," "ignorant," or "total jerk." Confidence plays a big role in this issue. In general, those who felt very confident that their competence was appreciated by others felt more comfortable being open about areas they didn't know about. Those with less confidence that they had stellar reputations were more reluctant to further erode a flagging reputation by admitting to more areas of weakness. In addition, employees feel more comfortable asking questions and admitting lack of expertise in areas that are less central to their job responsibilities. There is much more risk involved in asking questions that suggest one is less than proficient in one's supposed area of expertise.

Personal values, beliefs, and backgrounds also influence the comfort-level of different individuals in acknowledging that they need to learn. Some of the most respected and capable employees had personal belief systems that made it very difficult for them to admit they didn't know what they needed to know to perform their jobs. Such an admission made them feel inadequate and embarrassed. The anxiety that employees, especially non-technical employees, feel is captured in this comment made by Lindsey McKay, a course developer during an earlier study of the training department (Richardson, 1987). The incident she describes occurred in a meeting with a product manager and his team. Not only are the product manager and his

team *the* technical experts on the product for which she is developing training, but they are also the group whose budget is funding the development of the training.

I did say something really stupid to a product manager the other day. I said something in a meeting and I could just tell, immediately, that I had just made an incredibly stupid comment and I thought: I have to appear credible in my first appointment with them; it's only gonna be a half hour; we're fifteen minutes of the way through. I've made a total jerk out of myself.

And in the same conversation, another employee Lauren Taylor added,

That's like me doing [my job]. I had never done this. If I would have thought that five years ago when I started at Just that I would be doing this, I probably would never have gone to work for Just. I would have been so intimidated. And when we started working with this [new] group, I thought, oh, I have to go in and work on their projects. I mean this was like, I might as well put my head on that platter and take it in to them.

Many individuals don't feel they have what they consider a safe network of people at work to ask certain important questions. Since their bosses write their reviews, determine their raises and, to a large extent, control their advancement, they want to present themselves in the best possible light to their managers. When I asked Kevin McDuff, a course developer about the feeling that you can't reveal your weaknesses to your manager, he said,

Yes. Manager *and* peers. It's even getting to be peers more now. I think everyone has this basic insecurity that maybe they're not doing a good job. Even if they're very, very qualified.

In order to learn what they need to know to do their jobs effectively, many employees find technical tutors outside of work. I started out thinking of this as "the husband in the closet" learning strategy because it was in talking with several women that I first realized that we all turned to our technically trained husbands for tutoring. When I shared this finding with an unmarried employee, she suggested that I rename it "the consultant in the closet" because she knew of many unmarried women, who had found similar assistance from friends and "significant others" – usually men. The initial

conversation in which the "husband in the closet" came out of the closet was a conversation I had with Lindsey and Lauren (Richardson, 1987).

SR: I'm thinking that all of us agree that we're afraid to ask questions to show our ignorance, so when we realize we need to learn more, we find these sort of underground methods of learning so that we can kind of come back and act like, "Oh, I knew that all along."

Lindsey: Right. [laughs] I know everything. I know everything about a product that didn't even exist six months ago.

Lindsey then shared that when she needs to learn something technical, she turns to her husband, Jake, a computer scientist at another company.

When I first started in training, I was so convinced that I couldn't look stupid. I used to take these binders home to Jake, and he'd go over it and he'd say, "Oh, it's really quite simple." And he'd just kind of do this thing and he'd say, "See, that's all there is to it. And that's all they're saying." So, I felt a little more comfortable with him, and maybe it's just that I feel that maybe I would appear stupid, and there isn't someone here I feel I can go to, and they won't go tell everyone what a jerk I am. So, as a result, I'll just go ask him, or learn it on my own.

6. Through Experience, at Just or Other Workplaces

When I asked many of the more experienced and accomplished members of the training department how they learned what they knew, a phrase I heard repeatedly was, "I've learned from having been around the block a few times." Having been around the block included having had a wide variety of experiences, trial and error, success and failure. As Beth Whitney, who is becoming an experienced administrative assistant said,

Well, there's so many things that, like I said, that nothing's written down anywhere. There's nowhere where you can just read it and learn it. You have to experience it. Everything from what do you do when you bug somebody really bad or you just frustrate somebody beyond belief that you have to work with day in and day out. At school you just sit somewhere else. But at work you have to learn to deal with those.

In describing the environment at Just and comparing it to the previous company at which she had worked, Dory Carter describes some of the difficulty of learning on one's own compared to her previous work experience in which mentors and coaches were more available.

[At Just they say] Let me drop you into this boiling water. Maybe we'll add a few spices now and then. I have to go back to imaging what I've learned in other places I've worked. I had a mentor on my first job. We would drive together to meetings and he would be like a voiceover. He'd tell me what his goals were for the meeting, how he planned to achieve them. What the actions would be like. Then on the way home, he told me what had happened. Like, this happened the way I thought it would; this didn't. I still remember the first time he told me, "This guy is a lightweight. Don't expect too much from him." I haven't found anyone here at Just who I feel I can look to for that kind of mentoring, someone I'd like to be like.

Beth describes a situation in which she learned through experience, with a bit of scaffolding provided by a more experienced peer. Although this description of how she figured out how to perform a very important job function may seem exceptional, it is actually quite typical of how employees are "thrown in" and learn through making a stab at something, then adjusting on the next go-round if they receive corrective feedback. Sometimes the most important personal characteristic of the learning employee is the quality of being willing to 'make a stab at it.' And this willingness is frequently dependent upon that individual's self-confidence.

What happened was, the first time that I said, "Well, OK, I have no idea what we're doing, but I want to be a TC someday, and I know that they're gonna be extremely heavy on financials so I'm gonna need to learn this," so he [Andrew Bradford, her boss] said, "Well, go talk to Carol," and so Carol and I sat down the next month and did accruals together and it was pretty much Greek. I didn't understand a lot of what she did and then [laughs] and then...Joel walked in and he had an emergency and she had [to go], it was 3 o'clock, she had to have accruals done by 5 and she said, "OK, now you know what you're doing - go for it." [both laugh] so I just, I guess I started looking at it closer and really watching y'know, so she had done this and why had she done that and looking at her template for the way she does everything.

S: So now she was gone and you just had this

B: So she was walking in and out of the cube working on this other thing and she said, "Just do what you can do, and I'll check it when you're done cause that's all we can do right now. I don't have time to do it now." So basically we spent I think half and hour to an hour beforehand and then it was just sink or swim, so I did 'em and then I said, "OK, so here you go. I don't know what they look like." So she looked over 'em. And they were fine. So then the next month we worked together more like she showed me how she had gotten up to that point, how she had put everything in, how she logged everything, how she kept her files to where she knew if an invoice had come in... so she described everything, but this time we worked a little bit more together to see how it all worked together. And then that month I did 'em on my own and then she just checked 'em before we turned 'em in. And then the next month I was on my own...by then we had split the projects up and I did 'em. So, I've been doing them since then. So it was...kind of funny because it was just like "I need your help, can you do this?" So, I was like, "Sure, I guess I'll try it."

S: You came to learn and you wound up doing them for her.

B: Yea.

Theresa Melton shared some of her experiences in other workplaces, experiences which taught her a great deal, particularly about managing other people,

In pretty much every environment I've been in, there are several things that made me who I am, and part of that does create the comfort level that I have, faith in my abilities, even if I am scared to death. I have faith that I can do it. I became, not a manager, but a supervisor when I was 21 years old, and I had no experience, no manual, nothing, and they just threw me in and they said, "You can do it." And it was an all-male environment. And I had my age and I had my sex, I thought, computing against me in high tech, working for a company that was very old school-oriented. So I really had to scramble and learn quickly how to do things, what are the things to say. I wish I could say that I had a mentor, that I had a wonderful role model that I really patterned my life after, but I still haven't got one.

I've looked. There are certainly characteristics that I admire in a lot of people, but no one I wanna be. And I wish there was. I wish there was someone that I could just say, 'How would so-and-so handle this?'

But I think part of that was scrambling so young, so fast, having a lot of responsibility, that I just had to do everything for myself, but I worked in an engineering environment. A product development arena, that was all male engineers, and it was a very sexist environment, and I had to establish credibility with those people, because if you didn't talk their language, you didn't have a conversation with some of these people. And I learned there, again, find what it is I could bring to the party that would make me a partner. I'll never be an equal. I mean, never would they acknowledge you...But the engineers would never consider me an equal, even though I was higher grade level than some of these guys in...the supervisor role. I became a manager. I had two departments and whatever. I had more accountability, more responsibility than some of these guys, but I was never going to be an equal. But I had to find what it is I could bring to the party. Figure out what the weaknesses were that I could solve problems, and establish some credibility. What can I champion? And I did that. And I was able to do that and I was able to do that in an arena where, number one, they didn't have any expertise, and they didn't have any interest in doing that.

Similar experience, but different again, I then, when I was an original training manager, for the first time I worked, my training center was in the software development division. Now my other experience has been with hardware development engineers, for the most part. Some microcoders, but people that were designing computers. This experience was working with people who were developing software to run the systems. I couldn't have a regular conversation with these people...

Didn't communicate with each other. And in this arena I'm teaching management development, and human resource development...I would struggle with these people, because you'd make a joke and they'd all stand there. Or you'd try to talk to them about the value of communication, the value of listening, and you'd do some personal disclosure, share with them a model of something that you wanted to teach them. No reaction. Very, very painful. So it was kind of in an uphill battle there as well in that training to them was an evil. It was a necessity because the corporation mandated that they take it, but they hated it. And I kind of had to learn there, you know, it's a

similar thing, same thing I kinda drew upon, that those people were even worse than the hardware engineers, and you had to find some things that were gonna be successful, or find some champions that you could influence, and they would help propagate your success. And I got on their board of directors for their management development. There was a High Tech Management Club, and I was nominated. We had an election. Program director. Well, being an original training manager, I had access to a lot of people that would bring things to them. And I started bringing in things that would entertain them. Yakoff Schmirnoff. You know, those kind of people. (SR laughs) We did! I mean, I had the FBI in one day, to talk about what it was like, you know. For business lunches and business dinners. Things like that. So I had to start building a relationship on a different level.

Theresa learned through trial and error how to work effectively with black & whites. By the time she came to Just, she had a great deal of experience on which to draw. Even when she was new in the training department at Just, she had a certain confidence and credibility that communicated her experience and capability. Amy once commented to me, "Even though Theresa was an individual contributor, we all knew she was really a manager in disguise." When I asked Theresa where that aura of authority came from she said,

It's part of this ethic I have - I always think like a manager. I just do that...I thought of myself as a business manager there with the project, and this is what we had to work on. And those people were my team. They didn't report to me, but they didn't need to. I don't need people to report to me to make things happen....It's like Dean Witter commercials and stuff, that you are listened to all of a sudden.

Theresa continued to describe how she taught her team that, to be effective, they needed to work through the system. They could not ignore the protocol of elevating business issues only to their direct manager. She taught them it was inappropriate to go around their manager to deal with a higher level of management. Originally, Theresa's team of renegade black & whites had no intention of abiding by corporate protocols. Theresa described how she taught the team by modelling both the behavior and by demonstrating how it got the

desired results. She also shared how she had learned these corporate lessons, and how she had learned to effectively teach them to others. She had a difficult challenge in imparting her lessons to Sean, known for being an independent renegade with little use for corporate politics. When I asked her how she had managed to teach him how to work within the protocols of the system, she explained.

TM: He didn't accept it in the beginning. But he watched the process. And I would do that. That's just the way I would behave. I would say, "Listen. I want to inform William Jones and then I'll talk to Judith. And it's Judith's responsibility to communicate with Wallace." Others were going around Judith and undermining her, and we saw what kind of a position that was creating for her. And it was inappropriate. And even the team observed that. And I said, "Our responsibility is to report to this manager, my manager and Judith. It's her responsibility to manage up."

SR: Now that lesson -- if we call that sort of Theresa's Lesson Number 1 on Organizational Politics --

TM: Yeah, it was. It was.

SR: Where did you learn that?

TM: From working for really large companies. From having the industry experience where, no matter what it was that was an issue, you didn't go around the system. Work the system, and don't be afraid to work the system. I was never afraid to raise an issue. But do it on the right path. And also feeling self-assured enough that I wouldn't present a case if I didn't have something to present. Doing my homework. Not just going in and -- I mean, I am an emotional person. I do react emotionally to a lot of things. But I curtail that in my business environment. And that's one thing the guys had to learn. Because what they would do is they would react emotionally. What I taught them to do was be armed.

SR: And you learned that through experience?

TM: Just through working and my own mistakes. Being emotional, reacting -- I mean, I had to terminate people that were on drugs, I had a lot of nasty things very early on in my career. And I had to learn to step back. I made mistakes. Every

now and then I think – and I'm still close with a couple of people that worked for me for years and went through a lot. And every Christmas when I send cards I say, "You know, I look back at who we were then, and what I put you guys through, and I just say thank God you stuck with me." Because I was emotional. Because I was fighting upstream a lot more than I needed to be. Because I was much more aggressive than I was assertive. And I had to learn because I did it the wrong way.

7. Through Family Background, Early Experience, or Formal Education

Many of the effective employees demonstrate a business sense which consists of both an understanding of the corporate agenda as well as the know-how to get the job done. These people seem almost intuitively to understand the priorities of the workplace and how to achieve them. I suspected that this "business sense" may have come from early experiences or family backgrounds in which such values were transmitted and such behavior was modelled. I talked to several employees and found that in some cases family background did play a role. In other cases, employees expressed the notion that their families had actually expected and encouraged them to go into quite a different career area, and they had discovered their careers on their own. Many of the most effective employees described a certain joy and fulfillment at discovering their jobs, jobs that tapped long held interests and abilities.

Alicia Fernandez, whose first position at Just was as an administrative assistant, discovered her interest in the production area with its focus on graphic design, printing, and packaging. This was not so much the discovery of an interest as it was finding that a job existed which tapped interests and talents she has always had. Or, to use Alicia's words, she realized she had "a thing" for this job. It's also interesting to note that, when asked what the most important thing she had learned in her career at Just, Alicia talked about how the workplace had enabled her to meet her personal agenda, by allowing her to find what she wanted to do, her "thing."

SR: In your career at Just, what do you think the key, most important things you've learned are?

AF: One is what I want to do. You didn't know that. Because of my father dying and everything all my college money went for

the family. So I didn't get to go to college like I wanted to. I had to go to a city college. It wasn't how my mother had wanted it to be or how I thought it was gonna be. And I didn't know what I wanted to do. And because I grew up in a family of entrepreneurs, I thought I wanted to have my own business and I still do. I still feel that way...but I always knew I had a knack to always do the creative, the window dressings at my uncle's store, and I used to always do that, and I used to always love to do all the buying for the store too. I kind of to relate it to production because the creative aspect of doing window dressing and also the buying aspect of the financials of what I do in production and I fell into it, and so I think if it wasn't for being here, I would have never found out what I wanted to do, and I really enjoy it. And I wouldn't have ever known that this is a skill, this is something that I feel like I just naturally understand. That I have a *thing* for, I guess is what I'm trying to say. So that's probably the one thing is that's most important that I learned, what I wanted to do.

One of the most striking qualities about Alicia is her ability to grasp the corporate agenda. She is one of the people who seems intuitively to understand the value in this culture of being fast and productive and doing so with as little hand-holding as possible. In talking with Alicia, it becomes clear that her family life and adolescence taught her to be responsible, independent, and to learn the ways of business.

Before I worked at Just I worked at AnswerServe, a computerized telephone answering service. I was a supervisor there and that was really interesting. I was over 14 different gals...

SR: How long were you there?

AF: Four years. I was in school at the same time. I worked from three till 11. Went to school during the day. It was great. Cause it was so quiet there at night that you could do your homework at the same time. It was perfect. It was really ideal...I was in college at the time. Before that, I worked with my uncle at the bridal boutiques, while I was going to high school. And I would do buying, and be a sales clerk, and I was managing one of the stores. Which was kind of tough cause I was going to school during the day, and then I would take the bus and go all the way downtown, and I was working weekends, plus help my mom with the kids. So that kept me really busy, but it was nice because it was a really good experience. And then before that I

worked in a little store. I never worked at Taco Bell or anything like that, I don't know why. So that's been the extent of it. I don't have a huge blown job history or anything like that.

Although Alicia may not think she has a "huge blown job history," she has, in fact, an exceedingly valuable employment background in that it has provided her with the kinds of experiences that taught her values that are prevalent at just and many other workplaces. She has been a working person in a business environment since high school. She understands that time is money, that hard work and dedication are the ingredients of success and satisfaction. Her father's death meant that her family's financial position was precarious. Not only were her college plans modified, but, as the oldest child, she had to contribute to the family income and help her mother, who worked full-time, care for the younger siblings. Many more upper middle class employees might find these conditions disadvantages. In Alicia's case they have contributed to her success and to the satisfaction she finds in her work. There is also a price she has had to pay for her drive and her commitment.

Alicia: I do think a lot of the reason that I'm the way I am is because my father died young and I had to work and supported my mom – I mean, I was sixteen, I was responsible for having to work full-time and go to high school. And help my mom and be Dad. You know, I had to go to parent-teacher conferences at sixteen for my little brothers and sisters. Carlos [her husband] never had that kind of responsibility. He was the youngest. And I think those kind of things have a lot to do with how you are and how you do things.

SR: I do too.

Alicia: And I always – I look at him [her three year old son] and I think, 'Now, I wonder how you're gonna be?...I'm hoping he'll be in the middle. Because I don't think being too much of one or the other is good. I think if you can balance them both. 'Cause you pay a price for being too ambitious too. And I know I've paid a price.

Other employees come to discover what they want to do in spite of the ways they were pushed by their families and teachers. Among the most effective and satisfied employees with whom I spoke, all expressed the feeling that they

had found careers that were an excellent match with long-standing talents and interests. For the most part, they found deep satisfaction in their jobs. Many showed great enthusiasm for the day-to-day work; many said they "loved" their jobs. They felt that they were doing what they really wanted to do, because they could make good use of their talents in their jobs. This basic fit between their own talents and interests and the job tasks they performed usually gave them enough satisfaction to weather the corporate storms and survive in the corporate climate: the numerous periods of political upheaval in the organization and the heavy workloads and long work weeks.

In a conversation I had with Alicia and Phyllis, both of whom work in the production area, they describe how, in spite of families who were not attuned to the arts, they discovered an affinity for graphic design, and then found that they could define careers based upon that interest.

Alicia: What made you decided to do what you do?

Phyllis: I think it was — I've always been drawn. I've always, you know, did the creative stuff. When I went to college, I didn't know there was such a thing as a graphic designer. And I was gonna go for a true liberal arts degree...where you made your own program...'cause I thought, "I'm gonna go into law."...I was always gonna be a lawyer.

And then my roommate had graphics courses, and I'm, like,..."I can't believe that. You can read books and do projects and that's, like, learning." I couldn't believe it. And it just so happened that the next year all of my electives were closed...— I couldn't even take the basic art class...'cause it was closed...I had to take design, a lab class...And I was so interested in that, that's the way I went. And before I knew it, I was, graduating with a B.F.A.

SR: Was it a hard choice to change from being a lawyer to being in art?

Phyllis: Oh, yeah ... I think it was hard because no one in my family is creative. Everyone in my family is computer-oriented, very rigid...it's ...like I'm totally the most different person out of all my sisters and stuff.

Alicia: You know, it's funny because, like you said, you've always felt that way. And I can remember thinking as a little girl

— my father was very artistic. Even though he never did anything for hire. He didn't make his living that way. He had the most beautiful penmanship. And out of all the four kids, I'm the only one whose penmanship was like his. I've got very script writing. And I'm not saying that it's beautiful; I'm just saying I know that I have script writing that kind of looks like my dad's. Whereas...Manuela, Miguel and Thomas [her siblings]... all three of them think very much in terms of, like engineers.

Manuela — Manuela's the kind of person that you can give her something like, for instance, when we got the baby's crib? They gave us — it came with the wrong instructions for a different crib. We had no clue how to put this stupid crib together. Carlos kept trying and trying and we just couldn't figure it out. So I called Manuela up. She had the thing put together in half an hour. I mean, and Miguel takes apart TV's and puts them back together again. I mean, and they've always been that way. And I'm just like, "Wooooo," I mean, I'm all thumbs when it comes to stuff like that.

And yet I can look at something and see things, like, when we used to do the designs in the — Manuela and I, we both worked with my uncle, who worked with — owned a bridal shop. And my aunt would say, "Oh, go do the windows, honey, you do such a good job," or something like that. And I'd go out in the windows and Manuela would say, "Oh, let me do it." So Manuela would do it, and everything would look placed and very — I mean, it just didn't have any creativity to it. And so my aunt would come back later on and say, "Well, tomorrow you fix 'em." And I would come back and I'd go and I'd rearrange things and also I'd be talking in my head, "Oh, this one would be fun, this may be fun," and I'd come back in, and I would find that I would have expressed myself that way.

Early experiences and backgrounds contribute both to an individual's sense that they are in "the right place," doing what they enjoy, led by their natural talents and interests. Early experiences and backgrounds also contribute to an individual's understanding of the agenda of business. There is a great deal of folklore about "academic types" or "analytic types" or "space cadets." These labels are frequently used to indicate an employee who doesn't appreciate the realities of the business world: getting the job done, getting projects out the door, being fast and productive with a minimum of hand-holding,

understanding that compromises must often be made in the equations of time, money, and quality. Some individuals have the skills and abilities to do the job, but if they cannot effectively adapt those skills to the cultural milieu, they will encounter difficulty. Learning to apply their skills to the business environment then becomes an important part of their personal curriculum. Those who come to work knowing the ways of business have a significant component of the curriculum already under their belts.

8. Through Classes, Demonstrations, and Other Formal Learning Opportunities

Learning about technology through seeing demonstrations or taking a class. Classes about various aspects of the technology are offered through a special department at Just whose mission is to provide training to Just employees and their families on how to use computers. In addition, over the past two years, the training department has implemented its own professional development program, designed to provide members of the training department with specific types of skills and knowledge required for jobs in the department. Such job specific training had become critical since the department had committed itself to developing courses through the use of new training technologies such as interactive videodisk, and computer-based training. Most of the course developers in the department were not familiar with how to develop courses using these state of the art technologies, many still in their infancy, and not yet taught in most universities.

Just and the training department also sponsor periodic demonstrations by experts of new hardware and software products as they are released. Employees are invited to watch demonstrations, try out the products and ask questions. Such demonstrations and classes happen every two to three weeks somewhere on the Just campus. Attendance is not required, and the value and relevance of the learning opportunity is not known in advance. So, in a work day that usually is hectic and over-scheduled already, employees need to view such classes and demonstrations as a priority in order to make the time to learn what is available. The consensus appears to be that, while some of these learning opportunities are valuable, many are not.

Employees generally feel that these formal learning opportunities are fairly ineffective at meeting their most urgent learning needs. The reasons they cite fall into several categories: (a) The training is so general that the leap of applying the new knowledge or skill to one's job is too great. The learner is left to make connections to specific tasks without any scaffolding provided by a more skilled peer. In addition, the timing may be "off." An employee may not need to use the skill or knowledge for weeks or months, and by then it is forgotten. (b) Training is often provided by outside consultants who are not familiar with the cultural context in which the skill or knowledge will be used. The consultants often have a difficult time gaining the respect and credibility of training department employees because "they don't know what it's like here." "What they're telling us to do will never fly here." Sometimes such objections to the trainer are a cover for employees' deeper objections to the topic of the training and the new and anxiety-producing job task changes that it suggests. (c) Training sessions rarely provide enough depth into the subject matter. They often do not provide adequate opportunities to practice and internalize the learning of the new technology or skill and apply it to the specific job tasks that the employee performs. As a result, training is quickly forgotten, discounted, and viewed as "a waste of time." (d) Employees feel they have too much to do to make attending these classes a priority. (e) Formal learning opportunities rarely occur at the time employees have the need to know.

For these reasons, such classes or demonstrations which range from one hour to two days are sometimes cynically referred to as "magic workshops" or "band-aids on a hemorrhage."

Ironically, these same issues confront the training department from a very different perspective. The criticisms and frustrations that people in the training department feel about taking classes are virtually the same as those directed at them by students who take the classes they develop. Sales and support people often find the training classes ineffective because they don't address immediate needs. "Learning on demand" is a concept frequently discussed as a goal of the training department vis-a-vis its customers, the sales force. Learning on demand would provide learners with the skills and knowledge they need to do their jobs at the time they need it. Such learning

would include enough scaffolding, support, and situation-specific practice so that the learner could immediately make use of that training to be effective in doing the job at hand.

Just as this ideal vision has been difficult for the training department to realize in the training classes it creates, many of the same issues surface when the members of the training department are the consumers of training classes provided by others. Having walked in the shoes of the people who develop training, makes the training department employees no less frustrated and critical when they feel they have not received a satisfying return on the investment of their very precious and overscheduled time. Below, I will give more detail and examples of each of the reasons that formal learning opportunities are generally viewed as only partially effective.

1. The training requires too big of a leap to apply the new knowledge or skill to one's job. After a two-day training session on how to develop interactive videodisk training, course developers expressed the opinion that it was unreasonable for them to be expected to know how to develop a course using this complex and advanced technology after "being put through" a two-day workshop that explained general concepts, showed numerous examples, but provided no hands-on experience.

This is another situation in which the fear of looking stupid, the fear of doing a job that is less than "stellar," exacerbates the sense of frustration and anxiety experienced by employees. Becoming "stellar" at developing courses with this technology would require a period of being "on the learning curve." But in the process of learning, projects may be somewhat less successful than when using the more familiar, traditional approach to developing courses. In fact, first projects with the new technology could be quite weak. The pressure from the organization to be outstanding, the sense that the field is a tough critic and frequently "hates our stuff," the sense of competition between peers, the visibility of success and failure, and the individual's inner drive to excel make this an anxiety-laden experience for most course developers.

2. Objections to the trainer or training can be a cover for employees' deeper anxiety about changes in job requirements and

3. Classes do not provide adequate opportunities to practice and internalize the learning. As one might expect, in the particular example above, learning to develop courses using interactive videodisk technology, the anxiety experienced by black & white course developers in learning the new technology is much less than it is for grays. Black & whites may or may not value the formal learning opportunities ("too boring, too slow, not enough technological meat, not enough hands-on"), but they are generally eager to embrace new technologies and "figure out" how to make them work. It is primarily the "grays" who feel threatened by the pressure to master a new technology in order to perform their jobs effectively.

In this example, it is primarily the grays who would welcome the opportunity to have an expert or more experienced peer "hand hold them" through their first project. The training classes are not designed to provide this type of instructional scaffolding. Over and over again, grays express the desire to have a consultant or mentor who could provide personal coaching on technical content they need to learn. They often feel they are left to flounder on their own. Their preference for learning through others predisposes them to look for someone safe, someone "who won't go tell everyone what a jerk I am," who can provide the scaffolding that would enable the grays to feel comfortable and capable at using the new technology.

Black & whites do not have it made. They have areas with which they feel uncomfortable. However, as noted earlier, in a culture that highly values technical expertise, and particularly in a department where it is in short supply, black & whites often seem to have a special dispensation, permitting them more leeway in not being penalized for lacking expertise at the "softer" skills: people skills, political skills, understanding the sales cycle, keeping their budgets well-managed. Course success hinges just as much upon learning these skills, but black & whites often devalue them, claiming that they are either "all that touchie-feelie stuff," when referring to people management skills and political skills, or that they are products of the bureaucracy and a hindrance to getting the really important, technical work done, when referring to managing budgets, the production of course materials, and the substantial amount of paperwork that goes with the department's administrative processes. As Don said,

The black & whites...I know would avoid and do avoid those things like marketing, programs, and selling, with the soft skills, will avoid that like the plague because it's not within their realm. It doesn't — they don't have — the simplest way to describe it, they don't have models in their head. So they have nothing to rely on. They can't build anything. They can't synthesize. No models. And it just takes time to develop models.

Ironically, Don's description of the reasons that black & whites try to avoid learning about the soft skills also serves as a very apt explanation of the reasons that grays tend to avoid learning about the technology, "it's not within their realm...they don't have the models in their head." It is interesting that each "side" tends to discount or at least downplay the value of the skills that they are lacking, although black & whites do this more successfully than grays. They have the upper hand. Black & whites discount and de-value the "gray skills," the soft skills. Grays do not discount technical expertise; they tend to admire it and feel intimidated by those who have it. However, in order to keep the value of their own stock high, they also believe that they can be at least as effective at producing courses in their own, less technical areas, through excellent people and project management skills and through selecting and managing subject matter experts. And this does in fact seem to be the case. Neither side is "right." There is not one right way to develop effective courses. Perhaps the ideal course developer would have the technical facility of the black & whites and the management skills of the grays, but finding both skill sets in one person is rare.

What is important from a teaching and learning standpoint is that each "type" tends to learn more about and become more skillful in their strong suit and, through a rationalization and discounting process, avoids learning more about their area of weakness. In the long run employees would feel more confident and be more valuable to the workplace if they strengthened their weak suits, but the preferences of the learner, the nature of the learning opportunities, and the cultural values all conspire against such an outcome.

Kevin McDuff and I had a conversation which captured this issue:

Susan: I know what you mean. I don't feel like I even have enough time to learn the things that I think I absolutely must know.

Kevin: That's absolutely right. I can't even keep up with the absolutely musts.

Susan: When you don't have time for all the absolutely musts, how do you prioritize them? Do you choose the ones that you think you'll be measured on?

Kevin: Well, I think you do the ones you feel like doing.

Susan: But what makes you feel like doing some rather than others?

Kevin: Well, I think you do the ones you feel more secure doing, that you like doing better. Some are less safe and secure; there's more risk involved. There are some that are high risk. So I think you tend to do the ones you feel safer with.

4. Employees feel they have too much to do to make attending these classes a priority. Classes frequently don't provide training for which employees have an immediate need. Employees frequently say that they would be much more motivated to attend classes which gave them skills and knowledge that would make them more effective and efficient at their jobs immediately. However, almost all of the training calls for a sacrifice of time in the short term, in the hopes of a long term return on that investment.

Employees frequently have much more to do than they have hours in the day. In addition, past history makes many employees believe that the time spent in a class will not pay off in increased efficiency later. Amy Johnson, a gray training coordinator, had signed up to participate in a beta test of a course on The Wizard, an important software product. When Brian Duvane, the course developer for that project and the person managing the beta test, stopped by Amy's cube to tell her that enough other people were attending so that she didn't have to attend if she didn't want to, she commented to me,

Oh, okay. That was good, that was easy. So, I've got my Tuesday back...I didn't know that these guys were [satisfied with the number of people attending] and I'm such a Wizard weenie. I really know

nothing about Wizard that it would force me y'know to learn something about it, but of course, as the day draws nigh, I've got a full schedule, and then I don't wanna go.

Then she described the conflict she has in trying to do all the tasks she has to do while making time to learn about technology. She and all the members of her group had recently been "forced" to attend a new product training class.

What I'd really like is to go through what we [our department] develop. I'd like to force us to go through that. Going through the new product training. That was good. I like to know what it is that we develop. And I had never looked at those little reference guides or gone through any of their stuff. It's embarrassing, but it's true. So now, if nothing else, when I'm talking to people in other departments, and they talk about our new product stuff, I can...speak from first hand.

Amy is making an important point. Sometimes being "forced to" make time to take a course does pay off. Employees might think that pressing priorities preclude making time for a course, but sometimes if one is required to attend a valuable training class, it proves worthwhile in the long-run. The balance between meeting short-term deadlines and learning what will be valuable over the long-term involves making difficult choices and taking gambles because the value of the training at a later date frequently can't be predicted.

5. Formal learning opportunities rarely occur at the time employees have the need to know. Over and over again, employees report that they learn only when they are in the midst of a project and need to learn something to do their work. In a conversation with Don Lauritzen we discuss this,

SR: I had been thinking [about learning a new feature on a software package] that myself for probably six-eight months...and I never got around to doing it. But then I had a project where it was really gonna be convenient, I mean almost necessary, and then I said, "OK, bite the bullet, better figure

Don: it out. Yea. That's what I did. When it was a need. I needed to learn how to do it. I needed to apply it to a project. So bite the bullet and do it.

In a discussion with Kevin McDuff, the same topic comes up:

Well, I need a reason to learn. I'm not very good at the hypothetical. So if I have a project or an assignment and I need to learn something to do that, that's when I learn, not if I think someday maybe I might want to learn. There's too much going on that I absolutely must do to spend time on the things that might be good to know but aren't absolutely musts right now.

Summary of Learning Preferences Shown by Black & Whites and Grays

While there are not enough data to generalize about the differences between black & whites and grays in all areas, the chart below shows a major trend in the different ways that black & whites and grays differ in their use of the available learning opportunities. Black & whites prefer solitary ways of learning and rely on figuring it out as the preferred way of learning most topics, particularly technology. They observe others and read if they can't figure it out themselves. Grays prefer to learn from other people and have a strong inclination to get coaching from a more experienced peer. This often makes it difficult for grays to get help in learning about the technology if the peers whom they would feel comfortable asking don't have technical skills either.

While black & whites do learn business skills and how to move projects through the system by observing and figuring it out, they are generally motivated to find the solutions that require the least time and effort, not necessarily the organizationally correct way of handling such matters. Because the emphasis is often on bypassing the system and creating individual solutions, I have not included black & whites on the matrix as learning about business skills and moving projects through the system. It is essential to note however, that as discussed earlier, black & whites *do* learn how to move their projects through the system. They just learn to do it in ways that meet their personal agenda. It could be argued, however, that working around the system is, in the long-run, a key component of the workplace curriculum.

Figure 4-3

How Black & Whites and Grays Make Use of Learning Opportunities

	Learning Opportunities							
	observng	figuring it out	reading and other media	appren- ticeship	coaching	expernce	family bckgnd, formal educ.	formal learning
Topics to be Learned								
Marktplce								
B & W	✓	✓	✓		✓	✓		
Gray	✓	✓	✓	✓	✓	✓	✓	✓
Technology								
B & W	✓	✓	✓			✓	✓	
Gray				✓	✓	✓		✓
Instructnal Design								
B & W	✓	✓				✓		
Gray	✓	✓	✓	✓	✓	✓	✓	✓
Audience needs								
B & W	✓	✓	✓		✓	✓		
Gray	✓	✓	✓	✓	✓	✓	✓	✓
Business skills								
B & W						✓		
Gray	✓	✓	✓	✓	✓	✓	✓	✓

Alternatives to Learning: Hiring the Expertise

One of the most common, and often most effective ways of finessing the need to learn certain topics is to hire experts. Grays frequently hire contractors who are technical experts and black & whites are more apt to hire project managers who can take care of the administrative, financial, and implementation issues while they spend their time on the technological aspects of the project. Since course developers don't have the time to learn everything they need to know, their success often hinges on hiring the right person or people to supplement their strengths. Course developers need to learn to find and manage independent contractors who are highly skilled and effective in taking responsibility for portions of the job. Course developer Kevin McDuff talked about how he was able to be successful on a particular project because he had found someone who could "bring to party" an excellent set of skills and knowledge.

I had a great contractor on that project. He was from IVUG, you know the Ivy League Users Group, and he knew everything. He knows all about all the products. He knows what the end users want to know. He was great. He figured out everything that should be in the course. He was great. Cause I don't know what people really want to know and the product manager doesn't know either. We're too busy doing other things.

He then talked about his current project which is less successful, because the hired expert brings less to the party.

On this project I'm finishing up now, I have a contractor who's not so good because she doesn't know all that stuff about the products and what the end user wants to know. She expects me to tell her and that's hard cause I don't really know.

A recurring theme that arose among course developers is the anxiety associated with relying on "hired guns," as the source of expertise. When the department was smaller and the workload more manageable, many course developers tried to learn all the things they needed to know about the technology, how to move work through the system, what the field realities were like and what the students wanted to know. This task proved

overwhelming and many people worked 60 hours per week or more. As a result, there was a widespread feeling of burn-out and frustration. In response to that situation, the course development process was modified to acknowledge that course developers would be project managers who would hire the resources they needed to get the job done. Kevin describes the benefit and cost of this strategy:

I'm just finishing up a project now. A year ago, I'd have worked ridiculous hours to get this project done. This year I'm doing no writing. Last year I would have done most of the writing because I wanted to be perfect. I didn't do the content or the research. I offloaded it all to contractors. So the contractors worked 16 hour days. They got all the heavy stuff and the ridiculous pressure...I just managed the budget and managed some other stuff. The down side of all this is that even though I don't work the ridiculous hours, I don't really learn the stuff. I'm much less familiar with the contents. I don't know the contents. I'm happier and I feel better if I know more of the contents and I'm closer to the contents. Here it is 6 months after the product has shipped and I still don't know very much about it. Sometimes people will stop me in the halls and ask me a question and I don't know the answer. The contractor knows all that stuff.

How Learning Is Demonstrated and Rewarded

In this culture, as in most workplace cultures, learning for its own sake is not rewarded. As described above, bottom line results are rewarded. To the extent that employees need to learn and develop in order to produce valued results, the learning is implicitly or indirectly rewarded. Employees are evaluated, both formally and informally on results. The review process has already been described in Chapter 3. It is the formal process through which employees are evaluated annually by their managers. In addition, through the office grapevine, employees are also constantly being being evaluated by their co-workers on an informal basis. For both the formal and informal evaluations, actions and results are what get evaluated.

For example, an employee demonstrated, to the entire organization, a new computer-based training program she had developed. After her demonstration was over, one of her colleagues raised his hand and said to the

group of approximately 100 individuals, "your program moves so slowly that it was painful for me to watch." Many others nodded in agreement. The result was being evaluated, but the course developer apparently had not learned enough about the audience's needs to know the pace they would find appropriate, or she had not learned to program well enough to make the computer-based training program move at a rapid-enough pace, or both.

What Is Rewarded in This Workplace

What Counts as Valuable is What Gets Rewarded

Because results are what matter, results are rewarded. Getting the job done, and done right is what counts. As mentioned earlier, the overarching cultural value which describes how to be a valued member of this culture is to be fast and productive, and do so with a minimum of handholding. This translates to: be as cost-effective as possible. Contribute significantly to the corporation by producing valuable results and by costing the company as little as possible in terms of money and time, including the time of other employees. The bottom line in business is profits. And profits equal revenues minus costs. An employee is a resource whose value is measured primarily in terms of what he or she brings to the corporation's bottom line. And what an employee brings to the bottom line of the business can be measured by evaluating what value the employee adds minus what corporate resources the employee expends in doing so. The corporation does not explicitly state this philosophy as its way of assessing employees. It is a value which comes to be understood through cultural transmission. Some employees are more sensitive to this message than others.

What Constitutes a Productive Employee? Or How to Add Value

There is a bit of corporate folklore in the training department which says that our customers always want us to create products as fast as possible, as inexpensively as possible and to the highest level of quality possible. And members of the training department respond, "Time, Money, Quality: pick any two." This folklore illustrates the fact that in trying to satisfy the demands of the marketplace, tradeoffs must be made. With enough money

and resources "to throw at a project," it can be done quickly and with high quality. If you want it cheap and quick, then be prepared for the quality to suffer. And if you don't have lots of money, but you insist on top quality, then it will take time. Given the difficulty of achieving all three dimensions, and the payoff in the marketplace to those who can, employees who come closest are most valued by the corporation and most admired by their peers. They are known as "stellar," "super-stars," "awesome," and high-performers. These are also the employees who are most highly rewarded.

What Valuable Employees Had Learned

What do the valuable, high performers learn that enables them to achieve this status? In addition to the workplace curriculum described earlier, they also have learned, through the subtle process of cultural transmission, to understand and meet the corporate agenda. This includes learning that you can't do it all, and you can't learn it all. But you have to do enough and learn enough. They learned how much was enough. They learned what could be delegated and what they had to "own." They learned how to complete projects quickly and efficiently without a lot of hand-holding. They learned how to work the trade-offs between time, money, and quality so that there was as little compromise as possible. They learned to assess each project they worked on and to prioritize the dimensions correctly. They needed to be flexible so that if money "dried up" they could figure out a way to turn out an acceptable project with less money. If the timelines suddenly shortened, they learned how to cut corners and get the job done in less time. If quality standards changed, they accommodated the change. They also learned when and how to push-back at the system. There were times when they needed to "just say no." If the demands of management, or other departments, or the field required that they take on a project they believed would be unsuccessful and would lead to negative feedback, they learned to "cover their asses" and avoid being blamed for the failure. Above all, they learned how to do all of this while getting effective projects "out the door."

How do effective employees learn all of these things? Jean said it well when she said, "Any place I can get it from is where I get it." Those who do well in this culture are those who are sensitive to and responsive to the cultural

values described above. But, in addition to knowing what counts as valuable and therefore what they need to learn, effective employees are also able to learn well in a context which relies heavily on the individual to initiate and create appropriate learning opportunities. Moreover, each individual needs to be extremely motivated, persistent, flexible, and creative about meeting his or her own learning needs. This must be accomplished in the face of a variety of pressures ranging from the fear of looking stupid to a project deadline which demands that work be completed fast and furiously to an apparent lack of expertise on the subject to be learned.

In looking at high performers, their success is invariably based upon a combination of skills, experience, commitment, and hard work. Getting the job done well, and learning what they need to know takes much more than 40 hours a week, in spite of management statements urging them to balance their lives and not work excessive hours. They often work late at night and on the week-ends. In fact many claim that they learn most and do their best work then. They make work a priority in their lives and derive a great deal of personal satisfaction from their projects.

Who Provides Feedback on Employee Performance

There are numerous constituencies that provide employees and their managers with feedback on their performance, courses, and other deliverables. Comments, both written and verbal, come from:

1. Field customers

The trainers who teach the courses and their managers are customers of the training department because they use the courses and training products developed. Because their success depends upon the quality and appropriateness of these materials, they make their opinions known to the course developers and their managers.

2. Students

The students who take the courses are also customers of the training department because they are the audience for the courses and training products. Each time a course is delivered, the students who take it fill out

formal, standardized course evaluations. Reports are generated and sent back to the training department.

3. Managers

In addition to hearing from the two groups listed above, managers observe the smoothness and efficiency of the work process in which employees engage. They can evaluate employees' management of timelines and budgets as well as their ability to work well with a team.

4. Peers

Peers often know more about a co-worker's actual effectiveness at managing a project than the manager. Last minute rushes to meet timelines, playing with budget figures, and disagreements among team members are often hidden from management. Peers usually know the inside story and often will cover for one another. Unless an employee is "really a screw-up," and jeopardizing the success of a project, peers rarely report instances of poor performance or general weakness to management. They also frequently share with one another the inside story and their opinions about the true abilities of those they've worked with.

Thus, learning is demonstrated indirectly through performance and through the products one creates. Feedback on performance and deliverables comes through the constituencies listed above. Such feedback on performance provides employees with a good sense of where they are strong and where they need to improve. The areas in need of improvement clearly suggest where learning needs to take place. Virtually all of the employees I talked with in the course of this study had a clear sense of where they needed to grow and develop. The question of whether the learning will actually take place is more complex. The findings presented in this chapter begin to describe the many constraints and complexities involved in meeting learning needs.

Rewards

Organizational Rewards

The organization rewards high performers in a variety of ways, including:

1. Bonuses: cash, dinners, weekend trips, computer equipment.
2. Symbolic awards: trophies, certificates, mementoes.
3. Public recognition: At regularly scheduled department meetings, awards and bonuses are presented publicly along with a verbal description of the accomplishments of the recognized individual and why these accomplishments are valued by the organization and the company.
4. Positive feedback: Praise, recognition, appreciation may be expressed privately between one individual and another. This may be particularly meaningful if the positive feedback is given by a manager to one of her reports.
5. Reputation: Being thought of and acknowledged as a high performer; being respected by one's colleagues.
6. Career advancement: Promotions and movement up the corporate ladder are an option for those who are outstanding performers.
7. Salary increases: Raises are based upon performance.
8. Self-select projects: Those who are viewed as the best performers are given the opportunity and encouraged to take on the most strategically important and challenging assignments. Such assignments generally bring high visibility and the chance to be a "hero."
9. Self-select team: Outstanding performers are often given the opportunity to select the members of their team. This enables them to build a strong, compatible team. They can choose to work with gurus from whom they can learn. They can choose team members who will take on responsibilities for areas they want to delegate.

Different individuals find some of these possible rewards far more appealing than others. For example, at the quarterly organizational meetings, individuals who have recently made important contributions are called up before the group and publically recognized. Some individuals I talked with enjoy this experience and find it very rewarding; while others find it uncomfortable and embarrassing and prefer to "skip it." Some individuals are strongly motivated by the reward of a bonus check; while others say it's nice, but they would work just as hard and do the same job whether they receive extra money or not. As a result of these different responses to what is rewarding, the organization provides for different ways of rewarding

individuals. Sensitive and effective managers appropriately select the rewards on an individual basis.

Personal Satisfaction: A Key Reward

Employees work for their own fulfillment just as much as they work to help the corporation succeed. The most effective employees had achieved a very close alignment of their personal agendas with those of the corporation. In addition, they had a sensitivity to the business values that undergird the corporation. They understood that the corporate bottom line was always what counted in the workplace culture and that, from the point of view of the company, their own education, satisfaction, and advancement were secondary to benefiting the corporation, which in many cases meant getting a project out the door.

Other employees had a personal agenda less aligned with that of the corporation, and they may have achieved their personal goals by spending an unnecessarily large amount of time and resources on learning or doing tasks that were not essential to work goals. For instance, employees who find social interactions personally rewarding may spend a lot of time chatting. Other employees may spend a great deal of time playing with interesting technological features that have little relevance to their projects. Others may spend time and money attending classes to learn software that is not essential for the jobs they do. In each of these cases employees may then need to either cut corners or stay late to finish work. Sometimes work doesn't get done or is submitted late because time was spent on these other pursuits.

However, it's important to note that sometimes the "non-essential tasks," be they social or technical are often the motivations that cause employees to enjoy and find meaning in their jobs or feel part of the culture. Performing these tasks may fulfill needs that the employee needs to satisfy in order to feel comfortable and content with the other job commitments he or she assumes. Learning to balance these personal and corporate demands can be difficult.

Integrating the Corporate and the Personal Agenda

Learning has both short-term and long-term benefits. Long-term career development results from learning and is one of the major motivators of learning. Career development looks different for different individuals. In this long term view, different career paths are rewarding to different individuals.

Learning is also motivated by short-term benefits. The short term benefits come from (a) needing to know something that will determine the success of a project and (b) wanting to know something in which one is interested. Need to know is, to a large extent, determined by the way individuals define their jobs. Even when management proclaims that individual's should know how to move projects through the system or should have certain knowledge about the technology, individuals who do not have a cognitive preference for that area will work very creatively and persistently to define their jobs in ways that enable them to finesse such learning. On the other side of the coin, wanting to know about areas of cognitive preference is a strong motivator. Employees make time when they are busy, find learning opportunities in out-the-way places, develop social networks with potential teachers, and generally go to great lengths to learn what interests them.

The short-term dynamic of feeling intrinsic motivation and reward through learning what one is highly interested in is a strong undercurrent in this culture. It is the subtext of much of the dialogue but is rarely acknowledged publicly. Employees very much want to make their projects successful, but they define their projects around their own talents, interests, and cognitive preferences. And they may define their long term goals in ways that will enable them to do more of the tasks they prefer and less of the ones they don't, even if this means less money and less advancement.

Individuals care a great deal about professional growth. Having the opportunity to stretch and grow was one of the most frequently cited rewards of learning and producing successful projects. But individuals define professional growth in ways that enable them to develop their cognitive preferences. Black & whites often define growth as being able to work on advanced technologies, not on movement up the corporate ladder. Grays

look for growth in ways that enable them to interact with people in challenging and creative capacities.

The greatest rewards came to those who had achieved an excellent fit within the organization. When individuals were able to fulfill their own agendas while also making a valuable and valued contribution to the corporate agenda, they felt rewarded.

—CHAPTER 5—

RESULTS OF CASE STUDIES

Introduction

This chapter answers research question three: How do particular individuals learn and develop in this culture? In order to answer this question, the chapter addresses each of the sub-questions of research question three: (a) What are the sources of personal satisfaction of the four employees selected for case study, and how do these sources of satisfaction shape the way the employee works and learns? (b) What themes emerge in the employee's meetings (one-on-ones) with his or her manager? (c) What does the employee learn from his or her manager in these meetings?

These questions are answered by presenting a portrait of each of the case study individuals. The portrait is created in three parts. The first part answers subquestion one and presents a general discussion of the individual's personal agenda. This personal agenda is based upon the individual's sources of personal satisfaction. The second part of the portrait answers the second subquestion and describes the themes present in the individual's one-on-ones. It highlights the individual's interactional and learning style. The third part of the portrait answers the third subquestion and shows the individual in the act of learning, through an analysis of two lessons that took place in one-on-ones that each of the case study individuals had with their respective managers.

How Satisfaction is Derived: The Personal Agenda

The first part of the portrait, the description of the individual's personal agenda, provides a context for understanding the way the individual relates both to the workplace and to the lessons presented by his or her manager. The description of the individual agenda uses the data gathered on the case study individuals to describe the key motivations and sources of personal satisfaction for each individual. This understanding permits an examination of the relationship between the personal agenda and what an individual

chooses to learn. Often in this culture, learning opportunities present themselves and individuals make decisions about whether or not to make time for them. Although most people's schedules are extremely busy and "making time" means something else may not be done, or that the employee will have to spend additional time to complete required work, the way that individuals prioritize their learning opportunities offers an insight into what they find important and meaningful.

Themes in the One-on-One

For each of the case study individuals, certain key themes emerged. These themes involve the way each relates to those around them, sensitivity to and affiliation with the corporate agenda, confidence level, desire to be perceived as strong and supporting others or in need of support, as well as the topics on which each individual chose to focus. These themes were evident and quite consistent in virtually all of the individual's interactions not only the one-on-one.

Lessons and Uptakes of Lessons in the One-on-One

The third part of each case study presents a close examination of the individual receiving "lessons" from his or her manager in their one-on-one. The one-on-one is a highly revealing learning event. It is a regularly scheduled meeting between employees and their managers. One of the main objectives of the meeting is for the employee to communicate to the manager the status of the projects that he or she is working on and for the manager to share information from higher levels of management or other parts of the organization that might be relevant to the projects. Thus, the one-on-one is a key point of interface where the employee and the manager, either implicitly or explicitly, do conversational work which meshes the individual and corporate agendas. The manager also may serve as a coach, friend, or teacher providing advice or instruction to the employee in areas of weakness or uncertainty.

While this meeting offers an opportunity for individuals to learn, it is also an opportunity for employees to present themselves to their managers. The

learning opportunity is frequently shaped by the individual's desire to present an image of competence. It is also shaped by the tensions among the various agendas, the employee's, the manager's, and the corporation's. These tensions and the ways that individuals deal with them reveal a great deal about their personal agendas and how they learn at work.

Each one-on-one contained segments of talk that had the characteristics of a lesson: the manager "taught" a portion of the workplace curriculum to the employee. For each case study individual, I've presented two such lessons which serve to highlight the ways that both the employee's and the manager's agendas and learning style affect the interaction and what is learned.

Overview of Spectrum

The individuals selected for case study represent a broad spectrum of the varying personal agendas, backgrounds, and characteristics that individuals bring to the workplace. Among the characteristics which differ are the learning styles of the four individuals. Learning style refers to, "a preferred way of responding to, organizing, and communicating about experiences. Nurtured by the complex interplay of their individual makeup and social experience, individuals reach out in particular ways to make sense of new experience" (Dyson, 1989, p. 69).

The culture within which these employees work provides them with similar learning resources: other people, formal and informal workshops, brown bag lunches, a variety of media such as computers, computer-based training, trade publications, audio and videotapes, books, and company TV broadcasts. Yet, each of the case study individuals uses these resources differently. Each has different ways of valuing them, reaching out for them, integrating them into a repertoire of knowledge and behavior, and applying them.

The case study individuals also had different personal agendas and found satisfaction in different aspects of their work. These differences determine how they shape their jobs, spend their time, and learn. These differences also

determine how successful they are in achieving the corporate agenda and therefore, how the corporation values their contribution.

The five general categories with subcategories of personal agendas that were presented in Chapter 4 (Figure 4-1), are placed along the vertical axis of the matrix below (Figure 5-1). These five categories and their subcategories capture the array of ways that individuals find personal satisfaction in the workplace. The horizontal matrix lists the four case study individuals. Based upon the data gathered, each of the case study individual's main sources of satisfaction are highlighted. There were no set numbers of sources of satisfaction per person. Some sought satisfaction through many sources; some were strongly motivated by only a few.

Figure 5-1 Personal Agendas of the Case Study Individuals

	Jean	Violet	Sean	Don
Through Work				
1. the process	√		√	√
2. the product	√		√	√
3. results/benefits	√	√	√	√
Through Learning				
1. about technology	√		√	√
2. to manage projects				
3. to manage finances				
4. about business				
5. to manage people		√		
6. to develop relationships		√		
7. how training rel. to other fncions	√		√	
Through Relationships				
1. supporting others		√		
2. leading others		√		
3. collaborating		√		
4. interacting	√	√		
5. friendship	√	√		
Through Community Membership				
1. feeling of belonging	√	√		
2. opportunity to contribute	√	√		√
3. respect based on contrib.	√	√	√	
Rewards and Recognition				
1. respect of peers	√	√	√	√
2. respect of management		√		
3. public recognition		√		
4. material rewards				
5. advancement			√	
6. selection for key projects				
7. self-select projects	√		√	

The following sections describe the primary ways that Jean finds satisfaction at work, based upon an analysis of the data gathered. Jean's personal agenda fits extremely well with the corporate agenda. The activities that she most enjoys learning about and performing are also those that provide most value to the department. She serves as an example of an employee who learns effectively, perceives herself as effective, is perceived by others as highly effective, and finds great personal satisfaction in her work. As a result, she is also an employee who has much to teach others. It is interesting to see both how she learns and how, when, where, to whom, and why she teaches the valuable skills and knowledge she has to offer. These issues are explored in the sections which follow.

How Jean Derives Satisfaction : Her Personal Agenda

Jean Finds Satisfaction Through: The Process of Working - Satisfaction Gained from Visualizing, Planning, and Executing a Project.

After a major re-organization, when the funding of her project as well as many others had been cut dramatically, and most development specialists and managers were sent reeling, Jean's manager came to her and said, "I don't know what we're going to do about your area." Jean responded, "I've been thinking about it. I have ideas." This incident represents a consistent pattern. Jean thinks about her projects a great deal, both on and off the job. She frequently draws diagrams of her vision for the structure of a course and for a larger curriculum into which it could fit.

She is remarkably undaunted by the many large and small changes in the environment that affect her projects. While many other individuals become frustrated, or need time to adapt to new circumstances, Jean takes each in stride. She remains focused on how she can execute her projects in light of the new contingencies.

Work is a very large part of Jean's life. She derives a great deal of satisfaction from it and is very clear about the fact that she gets her satisfaction from working of projects. Although, with her talent, commitment, and experience,

she would be viewed as a strong candidate for climbing the corporate ladder, she doesn't want to. She doesn't enjoy the tasks that managers do nearly as much as she enjoys the tasks that she does in her work on projects.

Jean Finds Satisfaction Through: Learning about Technology

Jean has a strong interest in the technologies that form the subject-matter of her courses. She spends time both at work and outside of work learning about the products and what they can do. For example, over a long vacation that Jean took, she enrolled in a course at a local college to learn graphic arts techniques on the computer. She regularly reads the publications in her field. Like many of the black & whites, when certain technical journals arrive, she makes reading them a priority. If she can't find time to read certain journals at work, she takes them home and "reads them from cover to cover."

When opportunities to learn about technology arise at work, Jean makes them a priority. For example, Sean Miller had worked with a particular advanced technology that Jean would need to use in her next project. Jean saw Sean in the hall one day and asked him if one day in the near future he might make time to show her how the new technology worked. He said, 'If you have some time, I can show you now.' She accepted his offer, made learning the new technology a priority and spent over an hour having Sean show her its ins and outs, asking him questions, and collaborating with him on how she might best apply this technology to her project.

Jean generally made time to learn about the technology when such opportunities arose. Many other grays did not. They claimed to want to learn more, but also claimed that there were not enough opportunities and that they were too busy when impromptu opportunities arose.

Jean Finds Satisfaction Through: Feeling Part of a Larger Community/Entity

Jean has been at Just for almost six years and has interacted and worked with a wide variety people throughout the company on a wide variety of projects. When asked to write about herself for a department document she wrote, "I've been in the group since its beginnings. Pick any [course] development

area here, and I probably worked in it at some point." She likes the fact that she has deep roots in this community. She enjoys reminiscing about the department's history, the people who have come and gone, and the stories and folklore that she knows.

Jean stays in touch with many of the people with whom she's worked. Most of Jean's social network is initiated and maintained through common interest in technology and work related topics. She frequently has lunch or an after-work drink with people with whom she is currently working or with whom she has worked with in the past. The topics of these social interactions is often work related but personal topics and non-work related discussions flow too.

When friends at work move on to other jobs, get engaged, or have other significant events in their lives, Jean often takes the initiative to organize lunches or other types of get-togethers which serve to bring co-workers together as a community to celebrate, grieve, or otherwise share in one another's experiences.

As a member of the wider community, Jean displays a rare quality – being able to move comfortably from team leader to team member. She does not seek the spotlight. She is comfortable having others be in the spotlight, if that is a role they seek. Moreover, if the individual who is assigned to be in the spotlight is less able to prepare the documents and presentations required of them, Jean consistently does a great deal of work for them and allows them to present it as their own. When asked what motivates her to give so generously of her time and talents without always receiving the recognition such efforts merit, she replies that she just sees that as part of her job. Jean derives most of her satisfaction from doing the work itself and making a significant contribution to her team. Receiving rewards and recognition are not her primary motivators.

However, if the team needs a leader, and someone has to "belly up to the bar" and assume the leadership role, and/or the role of being in the spotlight, she will take on those roles and execute them with excellence. In a community where others have less flexibility in moving from one role to another, her

flexibility in this area makes her an exceptionally valuable team and community member.

Jean's motivation to contribute to a larger community is also demonstrated in her willingness and ability to adopt the goals and values of business, in general, and Just, in particular. We will see examples of this as we look at her one-on-one.

Themes in Jean's One-on-One

In the many interactions between Jean and her manager, Catherine, Jean made few actual requests for teaching or coaching. The teaching and coaching that transpires in the course of their interactions does not have the feel of a "lesson" because Jean is quite accomplished at what she does. When Catherine does communicate cultural values and priorities that might be construed as a "lesson," they are in harmony with Jean's understanding of the corporate agenda thus, the uptake is very smooth. Furthermore, Catherine and Jean have a relationship that has more the feel of a peer-to-peer relationship rather than boss to report. They have worked together in the past as peers, have a great deal of mutual respect, and are "on the same wavelength" vis-a-vis their goals and interactions.

Almost all of the "lessons" that occur between them could best be described as collaborative problem solving episodes and reinforcement of shared values. It appears that in some of the lessons, Catherine is deriving as much value from these reinforcement sessions as Jean.

In much of this one-on-one, as in most of Jean's interactions with Catherine, Jean provides Catherine with information. She describes to her the status of the project she is working on, the costs involved, and the roles of the various team members. Jean's intention is to provide Catherine with the kind of information that, as a manager, Catherine may need in her interactions with other managers, the field, and in the process of making decisions for the department.

There are several "lessons" in the one-on-one between Jean and Catherine. I will use two of them to illustrate two different purposes they serve. In the

first case, Catherine is, in fact, coaching Jean on the importance of meeting a particular deadline. The second example illustrates an episode in which sharing and reinforcing a particular cultural value benefits both Jean and Catherine.

Lesson One: "Hit the Deadline, But the Course Has Got to Be Number One."

In the first lesson, Catherine and Jean are discussing the date of a train-the-trainer session for a course that is being developed. Violet had been working on developing the course by herself but was unable to handle the workload. Violet had already changed the date of the train-the-trainer from December to April to allow more time to develop the course. When it became clear that, working alone, Violet would not be able to come close to meeting even the April date, Catherine brought Jean and Jane in to work with Violet so that the project could be completed successfully. The segment which follows takes place right after Jean and Jane have been assigned to the project. The new team of Jean, as team leader, Jane and Violet have had one meeting so far. In the dialogue below, Jean and Catherine discuss the plans that are being made to complete the project.

Catherine initiates the subject of deadlines by saying, "Well, we need to be sure too that we can still hit this train-the-trainer. Cause we've put another stake out there [by announcing the April date to the field training managers]." Jean responds by explaining to Catherine that Violet feels uncomfortable about meeting the April date and that she, too, is unsure about it. Jean approaches the idea of backing off from the April deadline, but Catherine provides a lesson on the importance of meeting the April date because it has been announced to the field.

Jean: I'd never sent an electronic mail memo to the field training managers saying, 'this is *absolutely* what the date was, and I didn't say to Marilyn Wade [the field manager in Atlanta, where the training would take place] this is absolutely the date. I said give me two dates that you can work from, and we're still working on our

Catherine: Doesn't matter. Doesn't matter.

Jean: understanding of it.

Catherine: They still think it's April. Doesn't matter if we say it's absolutely gonna happen here, or could happen on these dates. In their mind, it's April now. So.

Jean: But I will tell you that that's what she [Violet] told me after talking with Laurel [the vender who is writing the course]...And I also know that a month or a month and a half is not a whole lot of time to re-develop a course that may not be right.

Catherine: Right. Right. But I'm worried too that if you guys [you and Jane] are gonna meet with Carl and Violet and it means that you've lost another week in January so

Jean: So we will need to have a plan. So basically how I look at it is, if we don't have a plan on Friday, then I have to put a plan together over Christmas. Cause we have to have a plan when we come back.

Catherine: Yea, or we need to look at the April date.

Jean: Yea, it's those two things. I mean I almost want to say, this is what the plan is, live with it folks, whether you like it or not, find a way to live with it.

Catherine: Yea. Unless it's absolutely unreasonable that we're gonna miss the deadline anyway, and we'll have to look like fools in March, and we have to say, 'OK, we tried our best, but we couldn't do April anyway.' Yea, that would be my thing too. That's why I said earlier, if there's any way you can hit the deadline, hit it.

Jean: Yea.

Catherine: But if the course isn't gonna be there, the course has gotta be number one. So.

Jean: Yea. So that's the fear right now.

Catherine: OK. Well, we've gotta know that right in January, so we don't lose another week, if we can. So Jane and you, if you can go over it.

Uptake of Lesson One

This interaction illustrates how compatible Jean and Catherine are, and how cooperative Jean is in picking up the messages that Catherine is sending. They literally finish one another's sentences. Jean begins this segment of the one-on-one by communicating her concern about meeting the April date. She first takes the approach that, since no firm date has been set with the field managers, that perhaps there would be nothing wrong with moving the deadline out. Catherine squelches this idea through her first "lesson" — whether you say it's definite or not, once you mention a date, the field takes it as definite. Jean accepts this line of reasoning, but then gets to her underlying concern, "I also know that a month or a month and a half is not a whole lot of time to re-develop a course that may not be right." Jean has taken responsibility for re-developing the course that Violet has begun. She knows that a great deal of work must go into making it "right."

Part of the difficulty that Jean faces is that she is now leading a team that has members, particularly Violet, who are slow workers and have a difficult time making decisions. This one-on-one is taking place just before a week long Christmas break and since no plan is in place, Catherine is concerned that, upon returning in January, more time will be lost in developing a plan if that means consensus-building meetings with Violet and Carl, both of whom have reputations for having "endless meetings" with very little action or decision making resulting.

Jean addresses this issue by taking responsibility — either the team will have a plan by Friday, the last day before the Christmas break, or she will work over the Christmas holiday so they will have one when they return — "cause we have to have a plan when we come back." In saying this, Jean is implicitly saying that she is accepting responsibility for meeting the April date, in spite of her worries about how much work this implies. Catherine then cuts her a little slack saying, "Yea. Or we need to look at the April date." Now that Jean has demonstrated her commitment to the date and her willingness to give up part of her Christmas vacation to meet that commitment, Catherine can ease off and let her know that she is not unreasonable. Since the uptake of the lesson has been so successful, Catherine can ease off from pushing so hard, because Jean has embraced it. Catherine knows from their six years of past experience in working together, both as peers and as manager to report, that

Jean is "awesome," – a workoholic, and a highly capable employee who also has a great deal of respect for and loyalty to Catherine. If Jean says she will meet a date, she will do whatever it takes to meet it.

Jean then raises an issue on which she needs some reinforcement. She says, "I almost want to say, this is what the plan is, live with it folks, whether you like it or not, find a way to live with it." She says, 'I *almost* want to say...' indicating that she doesn't quite have it in her to actually say that. She knows that the only way to accomplish the objective of meeting the April date is to make such a statement, but it seems counter to the team spirit and consensus style of management that Just espouses and that employees expect.

Catherine responds to Jean's hesitation to be such an authoritarian leader by supporting her in that role. She supports that stance in two ways. First she indicates that, if they do not make the April date, they will look like "fools" who tried their best, but couldn't make it. This is a powerful incentive to do whatever it takes to meet the April date. Second, she supports Jean by telling her that she would do the same in her position, "That would be my thing too." These remarks lead Jean to respond affirmatively; she will pursue that course of action. With that established, Catherine adds an important caveat and an important aspect of the lesson, "But if the course isn't gonna be there, the course has gotta be number one."

This caveat is an example of a manager addressing the time, quality, cost equation. In this case, Catherine is communicating that, as important as the time dimension is, the quality is even more important. It would be better to move the date, and look foolish in the short term, than deliver a course with inferior quality. Quality, in this case, is number one. Jean responds by indicating that this is the crux of her concern as well.

Catherine's final comment in this lesson is, "OK. Well, we've gotta know that right in January, so we don't lose another week, if we can. So Jane and you, if you can go over it." In this comment she turns responsibility for the decision over to Jean, with assistance from Jane, who is also perceived as

understanding the corporate agenda. Catherine demonstrates her confidence in Jean's ability to understand the issues, manage the situation and make the correct decision. She also subtly indicates that Jean and Jane should go over the course and the plan, not Violet. We will see in the section on Violet that responsibility for such decisions is being taken away from her because Catherine does not have confidence that she can make the decisions that will best meet the corporate agenda.

Lesson Two: "Critical Path. Let's Go."

In the second lesson, Jean and Catherine are discussing a meeting they will be having the following evening with Laurel Shaw. Laurel and her partner own a company called Shaw and Dawson, the vender writing the course that Jean, Jane, and Violet are now working on. Like other vendors that Just's training department uses, this one writes training courses on a contract basis for large corporations. Laurel's company was hired and managed by Violet throughout the five months that Violet had been working on the course alone. Although the course had been scheduled for release in December, it was not ready.

Violet had repeatedly told Catherine that there was too much work for her to do alone, that she needed others to help her complete the project. Catherine resisted adding other employees to Violet's team because she believed that the task was an appropriate size for one person at Violet's level in the organization. After months of trying to coach and push Violet to get the course "out the door," Catherine had come to the conclusion that Violet would not be able to meet even the extended April deadline on her own. Since the consequences of an additional delay were significant—looking "like fools" to the field, Jean and Jane were brought on to the team to work with Violet.

Jean's first task in joining the team and taking over responsibility for developing and rolling out the course was to assess what had been done and whether Laurel and her company were the "right" vender to finish the project. Jean and Catherine had questioned how much the delays and problems in the course development cycle were a result of Violet's inability to

design and manage the course development and how much were a result of Laurel's inability to deliver appropriate course materials. Jean had come to the conclusion that Laurel would be able to complete some of the course components, but she was not the right vender to finish the majority of the project. In this one-on-one, Jean and Catherine agree that Laurel needs to be told where she stands. Jean will "be driving the meeting" with Laurel, and Catherine will be there to back her if needed.

Both Jean and Catherine know that this will be a difficult meeting. They both know that Laurel has worked very hard on the course and that, although she has a lot of subject matter expertise, she is not skilled as a course designer. Violet had hired Laurel to be the course designer because Violet did not believe she herself had the ability to design this particular course. Perhaps working with a course developer other than Violet, Laurel might have been successful. Nevertheless, both Catherine and Jean believe that she needs to be told that she will probably not be needed to do too much additional work.

In the "lesson" which follows, Catherine expresses her understanding of the cultural values. While she is in the role of manager, imparting a lesson, there is also a strong sense that she and Jean are reinforcing one another in enacting a set of cultural values which requires prioritizing business issues over people issues. This choice comes with an extra tug because Violet, who is "softer" and more people oriented, is on the team, reminding them of a different set of values. The lesson begins with Catherine outlining what needs to be covered in the meeting with Laurel.

Catherine: ...There are two things.

Jean: OK.

C: One is that we need to recast the entire project and then secondly an evaluation as to who the best vender is to accomplish that task. Because it may or may not be her [Laurel]. So I want to make sure that we put that up front that says, we're gonna look at it and once we've looked at it, we'll go with whatever makes the most sense. It may not be you guys [Shaw and Dawson]. So that somehow she's not figuring that OK, we're just gonna wait for two weeks and then the rest of it's gonna come...OK. So how does that feel?

J: That feels perfectly comfortable for me to say that. Particularly when you're there, cause it reminds me I have to do it.

C: [laughs] Oh good. Say anything and I'm just sitting there.

J: Well, when I'm sitting in a room with Violet, and I'm thinking about her feelings, it tends to make me

C: softer

J: get softer, yea. So that's all I'm saying.

C: Yea. I do that too...

There is a discussion at this point about whether, with strong direction, Laurel might have been able to successfully develop the course. This discussion deals with Violet's style of working with others and then turns to Violet's concerns about dismissing Laurel. Earlier in the one-on-one, Jean had explained to Catherine that Violet expressed her reluctance to "fire Laurel,"

There's a part of what Laurel does that's right for us, that her heart's in the right place, that she works really hard, that her materials, even though they're not where we want them to be, there's always something in it that says that she's getting a little closer to where we want to go.

To this, Catherine responds,

It's kind of like a teacher in school. Y'know you wanna spend time with everybody and there's always the student who's struggling along who you know can do it, and you do invest some portion of time with them, but when it comes down to where the rubber meets the road and you have to choose where you're going to invest your time. Do you target your class against the 25 people who are doing well and not the two people, and help them as you can, y'know, but they're not on the critical path? Or do you compromise everybody for the two? And it's kind of like, she probably does have a lot of good things, but we're on the critical path right now. We can't tailor everything to that.

Jean: Yea. We can't have that patience.

C: To bring her on the team. Yea. It's the time to say, 'Critical path. Let's go.' And we can figure out how to best work, but that can't be where our energies are right now.

J: Yea. Yea. So where we stand right now is that Jane and I have talked a couple of times and we're gonna talk a little harder tomorrow about stuff

C: Good

J: About where the course ought to be...

Uptake of Lesson Two

Jean takes up this lesson smoothly and without hesitation. It is not a new lesson, and it is not one that is difficult for her to accept even though it means accepting the toughness often considered necessary in business over the softness that may be valued in other cultural contexts, especially for women. In taking up this lesson as she does, Jean reinforces Catherine's position that, we can't get soft and spend our time on weak players, even if their hearts are in the right place. In addition, whenever Catherine communicates a success strategy such as the one above, Jean, not only indicates her uptake of the lesson, but also extends the lesson by showing how she intends to apply that strategy to her work. Moreover, the way she frequently applies it is as team leader. Therefore, Catherine's lessons to Jean pay dividends because she, in turn, communicates and implements that strategy with the team.

Another interesting characteristic of this lesson is that, even though Catherine introduced this topic, Jean maintains ownership of the topic because she always maintains a sense of responsibility for the outcome of the course and a willingness to do what is required to make the process and the product successful. She doesn't differentiate between her own success strategies, and Catherine's, (and even Jane's and Violet's). She evaluates all ideas and uses those that seem best for the success of the project. Catherine recognizes Jean's ability and desire to own the project. She leaves the ownership clearly with her. She takes a role of interested coach and consultant, adding ideas and support where she can. We will see how this contrasts with her taking ownership and responsibility in interactions with Violet.

Catherine's parable about the teacher who can't target the class for the two pupils who are slow is an important statement of her philosophy. Throughout my observations there were difficult situations in which a particular employee's style or abilities hindered a team or a project from meeting its deadlines and moving efficiently along the critical path. Catherine repeatedly adheres to her philosophy and refuses to let the goals of the majority be jeopardized by those who hold up the critical path. As we will see, she needed to apply this philosophy in her managing of Violet as well.

Continuation of Lesson Two: Ignore "The Tug," the Project Comes First

Although Catherine and Jean are in agreement that putting the success of the project above ensuring that Laurel and Violet are comfortable with "the people piece," they cover the same territory again. They seem to need to talk it through enough to reassure themselves that they are indeed doing the right thing. This is a decision that is taking an emotional toll, even though they don't say so explicitly. It is reminiscent of Shakespeare's comment about Lady MacBeth, "The lady doth protest too much." The vigor with which these tough decisions are espoused belies a degree of discomfort associated with them. This does not mean that Jean and Catherine doubt that they are doing the right thing. It is to suggest that they are making a rational decision which forces them to squelch a certain emotional tug to do otherwise. These issues can be seen in the subtext of the following continuation of lesson two.

Jean: [referring to dismissing Shaw and Dawson] If we said, "C'est la vie" to Laurel, how can we accomplish our task? And if we have a reasonable alternative to Shaw and Dawson, then I think we can make Violet feel more comfortable about it. And a second piece of that is that if we had an "amicable divorce," then she would be comfortable. Because she has been very uncomfortable and has voiced it all along...it's really important to maintain the relationship. That's one of her primary objectives.

Catherine: And I agree, but I guess when the rubber meets the road and I guess it's just the plain old business side speaks, we have to focus on the project, not the people. So if you're looking out for the project and you say we don't use them...and Violet's getting that tug, I'd say project says "You gotta go." We can't, I

mean the people thing is important, but we gotta be task focussed and say, if we had to make a choice, that has to be the choice. Cause the field's not gonna give a shit whether or not the vender was happy. They're just gonna say, "You guys have a crappy product." They're gonna say the training team did a shitty job on this product and now I have to go out and create my own course. So that's gotta be foremost in our minds, and then, not that we blow out the people piece, but

Jean: Once we've made the business decision, then we treat the people piece as a separate issue.

Catherine: Yea. Depending on the outcome. So, if you and Jane think that it's not the way to go, then let's do it and roll and

Jean: Yea. I think Violet's getting closer to it. Y'know it takes her a little longer to warm up to that kind of idea. Anyway, that's a little more harsh

C: Than she likes.

J: It's true

Again, we can see Catherine and Jean finishing one another's sentences, supporting each other in what is a difficult decision. In this final iteration of lesson two, we also see Catherine communicating the reason that this toughness is so important – the field, the customer for this product, will penalize them if their product is inferior. The emotional pain of being responsible for a "crappy product" will be even greater than that caused by dismissing an unsatisfactory vender. The unspoken, but implied, other side of the coin is that the rewards of the culture will be accorded to the team if the product is excellent.

But personal rewards and penalties are not the primary concern. The real point of Catherine's lesson is that the team and the individual's commitment is to fulfilling the corporate agenda. A personal agenda that calls for doing the "nice thing" must be subordinated. Staying on the critical path, meeting deadlines, staying project focussed, and making the course number one, these are the elements of the corporate agenda. This is what the company has hired Jean, Catherine and the others to do. This is a lesson that Jean takes up

without hesitation because it is something she believes in and is able to act upon.

The section which follows will show that putting tasks ahead of people is a lesson that is most difficult for Violet to learn because it goes against many of her most deeply held personal values. It is also threatening to her because, under such cultural values, she may be one of the ones who is sacrificed when "the rubber meets the road" and "it's time to say, critical path. let's go."

Violet August

Violet's value system is quite different from Jean and Catherine's. The primary source of Violet's personal satisfaction comes through her relationship with others. She enjoys working on teams where she can both give and receive support. Because she values the human side of these relationships over the business benefit that may be derived from the work of the individuals, she is strongly motivated to invest time and money in developing people and relationships until a satisfactory business end is achieved. She also expects her colleagues and manager to make that same investment in her. Unlike Jean and Catherine, she is reluctant to sacrifice the opportunity to grow and develop people, their skills, and performance in order to meet aggressive deadlines. Her empathy for others and her desire to be given the same empathy and nurturing make it difficult for her to buy-in to a business philosophy that says, "Project says, 'You gotta go.'"

How Violet Derives Satisfaction : Her Personal Agenda

Violet Finds Satisfaction Through: Appreciation, Rewards, and Recognition

Violet feels most motivated by appreciation and positive feedback. Since relationships with people are so important to her, earning approval and feeling valued by people with whom she works are very important. During the year I spent working with Violet, she received very little appreciation, reward, or recognition. It was a difficult year in which she was struggling to perform her job, a job which she found beyond her in terms of the time and skills it required. Violet compared some of her feelings about working for

Catherine to similar feelings she had experienced with another manager who didn't provide the positive feedback she sought.

Violet: Y'know that time that you asked me how things were going when I was first trying to get along with Kevin Duffy (a previous manager) and I had so many projects and I was totally stressed out. I mean that kind of stress level of so many projects, but y'know the thing is, even then, that wasn't the issue, it was not feeling appreciated. I mean I'll do anything (starts to cry) I mean that's sort of the the ironic thing...I mean it's a fault sometimes, because I'll do anything at the expense of the rest of my life [to feel appreciated]...Cause what I need is being told, "Hey you can do it, you're great, and I know it."

Violet expresses here the fact that, for her, getting positive feedback is one of the main factors that enables her to feel like a success. Because she has been unable to receive that positive feedback, she feels unsuccessful, unhappy and like she might want to quit her job. As she says,

V: Well, it made me feel for the first time like I might want to quit....there are moments that I get excited and have fun and stuff, but somehow overall I don't feel like a success and...I'm one of these people that likes to feel successful. I really, I thrive on getting positive feedback and I think I do more than other people, a lot of other people. I mean partly it's just...naturally part of my nature, and then there's the sort of lack of confidence side. I sort of want to bolster up what's sort of meeting a lack and then there's just that I like to perform. I like to be looked at as valuable. I mean on the positive side, that's just what I enjoy.

Later Violet elaborates further on the importance of appreciation and positive feedback on her ability to function effectively. She says,

V: In a way, with exactly the same pressures [on the job], if Catherine just told me I was good, or I'd done something well, once a week or something, y'know that in itself would make an incredible difference in my energy level. I mean just because, like it or not, it makes a difference to me. I mean, I'd like to be independent of that, but reality is that. But I'm not sure that, looking around at the managers, who's as supportive of a manager as I am.

As we will see in the next section, Violet never did find anyone who was "as supportive a manager" as she was, largely because it is not cost effective in business to be as supportive as she was and to prioritize the "people piece" as highly as she did. We saw this lesson being taught by Catherine to Jean in the previous section. We will now see why Violet was so reluctant to fire Laurel. She wanted to support Laurel, just as she wanted others to support her. Catherine explained that she saw the workplace like a classroom in which she, as a manager and upholder of the corporate values, could not target the pace for the two who were slow at the expense of the twenty-five "on the critical path." She applied this strategy to Violet as well. Violet was holding up the critical path with her requests for help and support. Catherine would not meet those needs.

Violet Finds Satisfaction Through: Relationships

Throughout the year that I spent both working with and observing Violet, she felt overloaded, overwhelmed, and unsupported. She continually reached out for emotional and work-related support. She rarely got it. Violet thrived on social interactions. She readily admitted that there were areas she had never learned because in her former role in the training department, it had not been necessary to know. Now that a new set of skills were expected of her, she turned to her peers and manager to help her learn what she needed to know.

Those around did try to teach and help Violet, but she was not a quick study or a quick worker. The more others tried to help, the more they felt she leaned on them and took too much of their time. On many occasions, others in the organization expressed these frustrations about working with Violet. Catherine was involved in numerous attempts to coach Violet and help her to fulfill her job responsibilities. These attempts were largely unsuccessful.

One of the reasons that Catherine was unsuccessful in her attempts to get Violet to take on new tasks was that Violet could not or would not accept a role that called for her to work largely on her own, managing a vendor with whom she rarely interacted, and spending significant periods alone working on budgets, reviewing materials, and completing other tasks. Violet kept

trying to negotiate and shape her job in a way that would enable her to work on a team. She saw her major strengths as being a supporter of others, someone who could assign, monitor, and provide feedback on the work of others, cheering them on when they did well and encouraging them when their work needed improvement. This was the role in which she saw herself as successful, and this was the role she wanted to play. Talking about how much she had enjoyed that role in the past, Violet told me,

We'd have a team with a whole lot of spirit and they would love working for me and...it would build my energy and all that kind of stuff. So it had all those kind of elements which seems to be important to me, to be part of a team. Y'know I've talked to Catherine about that too...I don't know if she understands...She says, "Well, we'd all like to work as part of a team." It's not really just that...I'm talking about efficiency...or what makes me so that I thrive, so therefore I have energy and do all kinds of things.

Violet talks about needing the team for energy and efficiency, yet what she is really suggesting is that she cannot function satisfactorily without it. Catherine realized this, but also was highly aware that this is not a cost effective way to do business. At one point Catherine said to me privately, "No way am I gonna spend \$30,000 so Violet can have people to help her. I don't even know what she wants to do with those people. She can't even articulate for me what those people will do. It's always just vague, I need more resources; I need a team."

The two became locked in a debate in which Violet repeatedly told Catherine that her job assignment was too big and she needed to hire contractors to assist her. Catherine repeatedly responded that the job was do-able without hiring additional people. Finally when it became clear that Violet would not be able to meet her deadlines, Catherine chose to take responsibility away from Violet rather than allow her to manage a contractor. Violet commented to me later,

V: It was my interaction with her that was the most depressing thing. It was more depressing than the electronic mail [a message she had received from a powerful field manager criticizing the course she developed as it was presented at the alpha or first test] because y'know, I

expected some kind of support from her, some kind of saying oh those assholes y'know don't worry, or heard good things about the Beta [second test] or something. I mean something to be sorta supportive. I mean she was really going into y'know sort of ice mode.

Violet Finds Satisfaction Through: Supporting Others

Just as Violet seeks the support of others, she also derives satisfaction from giving it to others. At one point in the study, Violet taped a team meeting she had with Carl and Catherine that I couldn't attend. The meeting was a long and painful session where each team member was trying to figure out what commitments had been made during the alpha test and what needed to be done to successfully complete the development of the course. During this session it becomes clear that Violet could not accomplish the job. Rather than allow Violet to manage a contractor, Catherine chose to bring on a second person to assume responsibility for many of the tasks for which Violet had been responsible.

This was a painful and difficult situation for Violet. Responsibility was being taken away from her, and she was forced to work without the supportive collaboration of a colleague. In spite of the personal issues she was facing, she remained sensitive to my feelings. Violet and I had worked together, facilitating the alpha test. At one point in the long meeting, there was a discussion of commitments that had been made to the trainers during this alpha test. Violet brought up the fact that I had made a number of commitments, and she wasn't sure that they could be fulfilled.

Violet: And, in terms of that, the end of the sessions, I can't remember the working exactly, but Susan was pretty adamant about what our follow up was to be, that we were gonna go back there and deal with all these issues.

Carl: So is there, are there other commitments?

Violet: I wish I had a tape of that. So that I knew exactly. You might just want to check with Susan and see if she can remember what it was. But I remember I felt a little uncomfortable at that point about whether we could do that.

After the session has ended, and everyone else had left the room, Violet spoke into the tape recorder and explained why she brought up the commitments I had made. She says that she just wants to be sure that everyone knew what commitments were made so that it was very clear what follow up needed to happen,

Violet: If it's sort of being taken out of my hands, I want people to know all the factors. I would never undermine you. I care more about my friendship with you than any of this shit.

And it was true. Throughout all of Violet's difficulties and the stress and unhappiness they caused her, she always made time for her friends, she always had a sympathetic ear for another person's troubles, and she always displayed a warmth and caring that few others in the department could match. In a way, this genuine interest and affection for people and their feelings and a priority system that made those concerns more important than "any of this shit" was at odds with the priorities of the workplace. This belief system made it extremely difficult for Violet to succeed at her job.

Violet Finds Satisfaction Through: Collaborating and Interacting with Others

In the course of the interviews and the many informal conversations I had with Violet, she frequently talked about the satisfaction and enjoyment she derived from collaborating and interacting with others. She invested a great deal of time and energy in such activities. She went to great lengths to make such occasions satisfying to those who participated, selecting a comfortable location, planning the agenda, taping sessions for those who wanted to review them, and insuring that food and drinks were provided when appropriate. Even when the topics to be covered were difficult or uncomfortable, if the interactions among the people involved were warm and supportive, Violet found satisfaction.

In looking back over a particularly rocky and unsatisfying episode, Violet commented that the best part of it was a rehearsal she did for a presentation she had to make to the field trainers. Catherine, Violet, and I came into the office on a Sunday evening and Violet rehearsed the opening remarks she

would make to the trainers who were coming to corporate headquarters. They were coming both to participate in the alpha test of the course Violet had been developing and to participate in an annual national seminar which, for these trainers, represented the most important formal learning opportunity of the year. Ironically, Violet's opening remarks were to explain to these trainers that they would not get to attend the seminar because Violet's team had failed to secure tickets for it.

Catherine knew that Violet needed to speak articulately and honestly about why the trainers had no tickets. Violet had been in charge and Catherine insisted that she explain to them what had gone wrong. Amy, who was on the team and shared responsibility with Violet, called this incident "the worst blunder of my career." The trainers and the field managers were extremely angry and upset. Yet, in spite of the circumstances, Violet found great satisfaction in having an opportunity to interact closely with Catherine and to receive special attention and coaching. She later said that that was the best part of the entire painful and difficult chapter.

Susan: ...looking back on this whole thing that's transpired in the last couple of months, what do you think you've learned from it?

Violet: By the way, in terms of something positive, a little learning experience, I mean what, the most positive thing was the rehearsal for the trainers. That was great. I mean that's real concrete, it's you know, it's real skill building...it's giving practice, giving feedback, that whole thing, I mean, I thought that was wonderful... Y'know and often she [Catherine] has a got a good political way to do it or a nice turn of phrase so whenever she does that, I love it...This is the one advantage of of the situation. It's like crisis, I mean before that y'know I was lucky if I saw her once a month and she was always saying that we were going over [our allotted time] as if I just chatted away.

In summarizing her feelings about the crisis that it took for her to get the kind of personal teaching and support that means so much to her and is an effective way for her to learn, Violet concludes:

I think I would have rather gotten some coaching and not had to have gone through this whole thing. But that doesn't take away

from the fact I really enjoyed that...I think she's very impressive, so that always makes me come back to that it's all my fault. But I don't think that is balanced way of looking at it, and it doesn't serve me. All it does is depress me.

Violet expresses here the crux of her dilemma. The only way she knows how to learn and perform her job is through interaction with others. And her desire to continue performing her job in this manner is so strong, that she is unwilling or unable to change, even though she is becoming less and less successful. She is experiencing the consequences of one who is failing: she is not meeting important deadlines; the field has sent angry links with negative feedback to her, her boss, and to managers two additional levels up; responsibility is being taken away from her; and, whereas in the past she received positive feedback on her performance, now she is receiving negative feedback in the form of what she calls "the ice mode" from Catherine. Even in the Sunday night rehearsal when Catherine provided her with several hours of coaching which she enjoyed and found very valuable, she left depressed. She could not help thinking that the project was in trouble, in a crisis, and it was all her fault.

And yet, Violet's preferred way of learning and performing her job is so strongly dominated by a need and desire to interact with others, that she continues to turn to Catherine over and over again appealing for help in hopes of getting her needs met. She continues to ask Catherine for coaching on tasks that Catherine expects her to know how to do. And, in spite of repeated refusals, she continues to ask Catherine for approval to hire contractors to help her because the job is too much for her. These strategies have not helped her to be more successful on the job, but Violet seems unable to adapt and develop more effective strategies.

In the one-on-one we will see how she reaches out for teaching and support in her preferred ways, and we see how Catherine responds. This one-on-one offers an interesting contrast to the one-on-one between Catherine and Jean.

Themes in Violet's One-on-One

Unlike Jean who began her one-on-one with Catherine by providing her with a status report on how the team was progressing and what they had accomplished, Violet begins her one-on-one by asking Catherine's advice on a small decision she has to make. Violet cannot decide whether she should attend a two day class which is being offered the following week, the same week that the beta test for her own course will be conducted. The course Violet is considering attending is a new course on General Selling Skills, and it presents a general philosophy of selling which Just has just adopted as a foundation for all of its sales people. All of the course developers in the department have been asked to attend this course so their own courses can build upon its selling philosophy. The course will be offered several times, so the dates that Violet is considering are not her only opportunity to attend.

Violet's indecision and request for help from Catherine set the stage for Catherine to deliver a lesson. The lesson is interesting for several reasons. First of all, Violet's request for help in making this type of decision is quite unusual. Employees at Just are given a great deal of autonomy and independence in making such decisions, and generally employees value this autonomy and do not take their manager's time to collaborate in such a minor decision. Violet's request for help in making this decision reflects, not only her need for hand-holding at a level that seems inappropriate, but also her state of mind. She has become so overwhelmed by her workload and the pressures and stresses that it is causing her that she has become increasingly less able to make fairly simple decisions.

The other quality that is evident in this lesson is Violet's lack of ownership and uptake. Unlike Jean, who added her own thoughts to the lessons, extended them and enthusiastically embraced them, Violet's comments are limited to Mmhms and Rights. When listening to the tape, these responses leave the listener with the sense that Violet is passively listening, but not owning responsibility or taking up the suggestions that Catherine is making. Catherine continues to work harder and harder to provide Violet with ideas, suggestions, and advice, apparently hoping she will respond by accepting responsibility, but Violet never does. Several times during the lesson, Catherine reminds Violet that she must make the decision, but Violet never does make a decision.

Violet's Lesson One: "It's Your Choice"

Violet begins by reminding Catherine that she is overwhelmed and is trying to cut out any extra work so that she can complete the tasks for her project.

Violet: It seems like it would be good to check and see that the course [she is developing] seems on line [with the new Selling Skills class] if I've just seen the beta [for her own course]. Maybe it would be really good to do it the 9th and 10th. On the other hand I'm kinda thinking if there's anything I can cut out, I ought to cut it out

Catherine: So your question is: do you have to attend? (both laugh)

V: Right

C: OK. I'm just trying to follow here. OK. Well, there will be more sessions that'll be offered. It's probably really valuable and it's probably never going to be a good time, but if this is an exceptionally bad time, then you'll have to make that choice. But what we had talked about too was that on the 6th that's your debrief time to get Shaw & Dawson back on track.

In saying, "So your question is: do you have to attend?" Catherine gives Violet some subtle negative feedback on her characteristic wordy and round-about way of approaching an issue. She then reminds Violet that in this environment it's always busy, and prioritizing activities is part of the job. Catherine will not tell her what to do, "you'll have to make that choice." She does, however, share her own value system and success strategy when she says, "what we had talked about too was that on the 6th that's your debrief time to get Shaw & Dawson back on track." Catherine consistently advocates placing the development of courses and achieving excellent quality above all other priorities. This is the corporate agenda; this is what course developers are paid to do. One of Catherine's strengths is that she is very clear and consistent about meshing her own agenda with the corporate agenda. She does everything possible to impart that value to those with whom she works. She is letting Violet know that getting the course on track after the beta is most important, more important than seeing the selling class.

V: Well, actually, as I look at it, for one thing almost nobody can meet that day, marketing and evaluation, but also the final beta material won't be ready until the beta so I almost need that day and the weekend to do my really nitty gritty review, sort out what I got. I mean at least now I see that as some advantage now that we can't meet on Friday to follow up the debrief

C: You mean you won't have seen the materials that they're delivering on Thursday and Friday?

V: Right. I won't have seen those final materials

C: Mm. How interesting. OK. OK. Well, like I say, it's your choice cause I think you have another session in November too. Then what you may want to do is ask if Dawn or somebody out of Tamara's group would be willing to review those particular modules just to make sure they do have everything in them, or somebody from our team after they go through this session, just to make sure they [your course materials] are on track. Instead of just expecting that they will be.

V: Right.

Two interesting facts come to light in this passage. Violet indicates that her process of debriefing from the beta and getting the course on track actually consists of a meeting with Evaluation and Marketing. True to form, she has found a way to accomplish her task through collaboration with others. It also comes to light that she will not have reviewed the beta materials before the beta. Catherine obviously doesn't approve and comments "How interesting." Violet commented to me after the meeting how irritating she found this "dig," because Catherine had recommended that not reviewing the materials prior to the beta was one way she could save some time and better manage her workload.

But Catherine wants to stay focussed on the decision about attending the selling class and the implications of Violet's not going. In the section below, Catherine wants to be sure that if Violet doesn't attend, she finds a way to get someone to check her course to be sure that it is in line with the new selling philosophy. She also wants to coach Violet on the concept of appropriately using the time of others. She wants Violet to ask for help from another employee, but she also wants her to realize that other people's time is

valuable and you can't impose too much. She says, it would be like booking a two hour meeting with someone. The implication here is that one recognizes that booking a two hour meeting is asking quite a lot of someone with a very busy schedule; it is not something that is done without good reason. Most employees try to keep meetings to an hour or less. Violet regularly schedules two hour meetings.

C: If you can't attend, I think that would be at minimum. But, yea, if it doesn't work for you, you know, you have to make that ultimate call.

V: If I can fit it in, I will. But maybe the 18th or 19th, yea, that's probably uh

C: But if you do it the 18th or 19th, I think that would be more for your edification, not for the class. So I think that you have to get those materials to someone either somebody on our team, or somebody from Tamara's team to review right after that class.

V: Mmhmm. Mmhmm. Or um (pause)

C: But if you can't come, at least it buys you back the two days. But somebody else is gonna have to take a couple of hours at least to review your materials.

V: OK

C: So, it would be like you booking a meeting with somebody for two hours on the 11th.

V: Mmhmm.

C: Today. So whether that be Susan or Carl or me or who ever, someone from Tamara's team. You probably wouldn't have to wait to give it them on Wednesday.

V: Right.

C: Just as soon as you get the Beta materials

V: Right. Right.

C: You could give it to them. Then you could give them a week to ask for it back or something.

V: Mmhhh. Mmhhh.

C: Or maybe you give it to them Wednesday and ask for it back on Friday so you can incorporate it into your review or something. I don't know.

V: Mmhhh. Mmhhh.

C: But I think those would be the two ways to deal with it if you can't make the 9th and the 10th.

V: Mmhhh. Mmhhh. Right. Right. OK. (pause)

C: How does that sound?

V: Uh. Fine. (long pause)

Uptake Of Lesson One

The lesson ends almost abruptly without Violet offering any evidence that she has taken up the lesson or even that she appreciates the thought and energy that Catherine has just put into thinking through her decision. Catherine concludes by asking for some response from Violet when she asks her, "How does that sound?" Unlike Jean who continuously extended lessons by showing how she would apply them to her specific job tasks, Violet responds by saying "Fine." She doesn't indicate that all that coaching has enabled her to make a decision. It is a frustrating situation for Catherine.

Later in an interview, talking about another painful interaction, Violet sheds some light on this episode when she describes how she feels in interactions with Catherine,

V: And then Catherine is asking all these sort of hard-nosed questions and saying, 'I don't know why some of these things aren't clear.' Y'know sort of like we've just gone through the beta and she wants to know, 'OK what's the new agenda?' Well y'know we're still trying to sort it out. But it's like y'know somehow, her whole way of expressing things, is she can make everything sound (unclear), and it's not my strength and but I really do need the process of thinking it all out and if I had, if I could just sit there and work on and talk things out my way and

let Jane know how it is in sort of my style, we can come to a conclusion a lot faster than Catherine sort of saying, "You've gotta operate this way." And then I freeze up and then I don't work well on those terms.

When Violet says that "I really do need the process of thinking it all out...and if I could just sit there and...talk things out my way," she hits on a very important point. In order for Violet to process information and make decisions, she needs to go through her own process which invariably means discussing it in a supportive, collaborative context with at least one person (and usually more). She does freeze up when pressed to come to quick decisions, but that is what this workplace demands. Violet is not effective at being fast and productive with a minimum of hand-holding. She also is more tuned in to her own people-oriented agenda and the enjoyment she gets from long discussions than the corporation's agenda -- the bottom-line.

Catherine's understanding and advocacy of the corporate agenda underlie her need to ask the "tough" business questions that she believes need to be answered. Catherine's prior experience as a course developer serves as the basis for her understanding of Violet's situation. Jean and other course developers frequently comment on how much they appreciate Catherine's ability to cut through complex problems and ask the right questions. Many of the other managers have never "been there." They haven't worked their way up through the ranks as Catherine has, so what sometimes is interpreted as more trust in their employees, or more hands-off management, really comes from not having experienced what the "worker bees" actually do or from not knowing what an excellent course developer would do. Catherine's experience as a course developer and the questions she asks are one of the "gifts" she has to give those who work for her, sharing what she did so successfully. However, these gifts are not well received by Violet, and indeed are not perceived as gifts, because they do not match what she is attuned to learn.

The important "curriculum" that Catherine has to teach is largely lost on Violet for two reasons. First of all, Violet resists taking up the corporate agenda because it means denying her own, non-cost-effective agenda based

upon working with others. Secondly, Violet doesn't learn well from Catherine because she is so intimidated by her.

Violet: I'm intimidated by her y'know that there's something about her that there's this new level of authority figure thing that I still haven't really gotten over...I don't know if it's obvious to her; it may not be because it's not just like I act like a kid around her, but there's just some level at which I don't operate at full at peak capacity around her and assert myself completely and as articulate as I might be.

Violet's assessment of herself in this regard is supported by the data and is particularly striking in listening to the tapes. When she meets with Catherine, especially in interactions where Catherine is being quite "directive" to use Catherine's word for it and in "ice-mode" to use Violet's word for it, Violet stammers much more than she usually does, speaks much more slowly, inserts a very large number of ums, and becomes much more tongue-tied. Her speech patterns do reflect her feeling of intimidation and she is much less articulate than she is in interactions where she feels more comfortable. In my informal interactions and interviews with Violet, she displays sharp insights, wit, and a strength of character that rarely comes through in her interactions with Catherine. These differences can be discerned somewhat from the portions of the transcripts quoted in this paper, but are much more apparent when one listens to the tapes.

Viewed in this perspective, Violet's participation in the lesson above takes on a different dimension.

Catherine's Lesson Two to Violet

The following lesson appears to be much more of a conversation than a lesson, but Catherine is transmitting important cultural messages and modelling a way of handling sensitive issues. Violet's main agenda item in this one-on-one was to present to Catherine another of her numerous requests for "additional resources"--which meant hiring additional people to form a team to work on the project. In the past, Catherine had turned down these requests for two reasons: because she felt that the task should be manageable for one course developer and, because the department budget

would not allow for the substantial expense of hiring one or more full-time contractors to work on this project.

During the previous week it had become clear that, in spite of Catherine's belief that the project *should* be manageable for one person, it was not being done satisfactorily and the department and Catherine would suffer negative consequences if help was not provided to Violet. Violet knew that Catherine had come to that conclusion and was greatly relieved. Furthermore, she had talked with Carl, the business manager for the project, and he had negotiated with the marketing department and discovered that they would be willing to fund the cost of hiring the additional contractors needed to complete the course effectively. Thinking that now she had the ingredients she needed to sell her solution to Catherine, Violet had spent the weekend developing her justification and writing up her plan. It was based largely on the fact that marketing could provide the needed funding.

Violet also told me privately that her husband, David, had worked with her on the document because he had some experience on this sort of thing and was very good at it. She, like many other employees, has found a safe coach, consultant, and sympathetic partner to help her deal with difficult aspects of her job--the consultant in the closet. David had particularly helped Violet to "remove the emotionalism and negativity" from the original draft she wrote. In creating this document, she has worked hard to present her case in a rational and business-like way. Her husband also reminded her that appealing to Catherine in an emotional or negative fashion would be counter-productive. In the interaction which follows, Violet is walking a fine line between wanting to get Catherine to deal with the request then and there, and yet not wanting to come across as too emotional.

What both Violet and David have not understood in presenting their case is that Catherine doesn't really care whether the funding for these contractors comes from the training department budget or the marketing budget. She is making a business decision and does not believe that Just should invest a significant amount of additional money into this project. It is already, she believes, costing more than it should and taking more time than it should.

The fundamental argument that another department will pay holds no weight for Catherine.

As the lesson begins, Violet hands Catherine the document which presents her case. Violet had expected that a discussion of the document would follow. It did not. Catherine's goal in this lesson is clearly to avoid discussion of this recurrent and difficult issue. Both Catherine and Violet refer to talking it over with Lisa. Lisa is a part-time employee who had been assigned to help Violet in a recent attempt to get the project back on track. Getting Lisa to agree that additional help is still needed becomes a way for Violet to strengthen her case. Discussing the issues with Lisa later becomes a way for Catherine to avoid discussing them with Violet then and there. Catherine has discussed these issues with Violet on numerous other occasions, explaining that it is not cost-effective to bring in additional contractors. She has been unsuccessful at teaching that lesson and wants to avoid again confronting Violet's appeals for costly help.

Violet: (pause) And then this is what I was working on over the weekend. Thinking about the whole situation and basically realizing that we still don't have a solution that I feel sure will work and relying on Lisa alone.

Catherine: OK.

V: And y'know Carl was coming up with the same conclusion. We were talking about that at the end of the week. And then he found out that marketing actually had the extra money so

C: I 'm meeting with Lisa this afternoon at 3:30. Is this something that I can review this afternoon and talk some with her about and get back together and chart a plan?

V: Um.

C: I think. I don't know if Annette has contacted you yet, but I can't make the 4-5 [meeting] that we're scheduled for today.

V: No, I didn't.

C: So, I think she's gonna try to reschedule it for either tomorrow or Wednesday morning before the beta so Lisa doesn't

have to come in so many days. So she was gonna get to all you guys. Maybe she's gotten to the others, but not to you yet.

V: Um. Well, in that case why don't we look at this because Lisa, um, I showed this to Lisa this morning and she thought it sounded good, so, I'd sort of like to make sure it gets

C: Well, I guess my thought is, Lisa and I are meeting at 3:30, if I can take this and digest it, I'm also meeting with Carl, I can get something back to you this afternoon, so we can get action going, if that's the concern about waiting til Wednesday morning.

V: Yea. Well, then the problem is then I'm not in on the final discussion.

C: Well, I imagine this is kind of your thoughts on where we need to go. I'll just respond to that.

V: But then how do we continue the dialogue? It's just, uh, it might

C: Well, my guess is, it would be approved. Right? You guys have spent a lot of time and energy thinking about it.

V: Yea. Well. Great. Um. It's just. It might

C: So, that's why I'd just like to digest it some. And then I'll just drop you a note, go or no go this afternoon. If we can't get all of us together, I don't want it to hold up the process. Unless you have anything else to say over and above this.

V: (long pause) Mm. No. This probably summarizes it, but it might not, you know but I thought if you read it and you had questions then I could answer them.

C: OK.

V: I just wanna

C: OK. Well, I've also got a number of notes that I took. That's why I say that I'd rather take a look at this offline so I can take a look at the things that I looked at and jotted as deal breakers too. Um. And then if I have any other questions, I'll just pop by and maybe try to grab you this afternoon, and make sure whatever Lisa's thoughts are, Carl's thoughts are, and then we can just roll with it. But I have things that I want to look at and that's why I

don't want to look at this right now because I have things that I want to make sure get folded in.

V: Mmhmm.

C: So that would be my preference unless that just absolutely throws you off track.

V: Um. Well. Uh. I would feel better about it if we had the 4-5 meeting where I knew for sure we were wrapping it up. I mean the fact that uh y'know, we have the staff meeting too, I don't know if there's any way to uh

C: Doesn't look like it. I don't think that's catastrophic though. I don't have the need to have all of us together. I think if this; if we agree to this, I think it should be pretty clear. If we need to modify it at all I can jot that down, so everybody gets it. I think we could still get everybody together on Wednesday, just to answer any questions or whatever. And if I need to talk to you about it further, we could talk in the morning or something?

V: Yea. I mean, maybe, it's just, you know, it'll just be straight forward.

C: Yea.

V: I was just kind of eager to, you know, get this rolling.

C: OK.

V: The anxiety for so long.

C: OK.

V: So those are uh (pause)

C: Oh. that's it. OK.

V: Yea. Those are the things I had, I mean uh.

Several things are interesting about this "lesson," or non-lesson. Viewed in the larger context of Violet's numerous requests for hiring help, it's interesting that Catherine has stopped trying to explain to her why that solution is inappropriate. Violet is no longer receiving the teaching that she

needs more than ever. Catherine doesn't have any more time for "the student who's struggling along." It's that time for "critical path: let's go" and Catherine has chosen to make the business decisions that need to be made without investing further in trying to teach Violet. She clearly does not want to open the Pandora's box of a lengthy discussion at this point. Her comments are curt and strong. This is what Violet calls ice-mode.

It is interesting that Catherine suggests she will approve the plan when, in fact, she knows that she cannot support a plan that calls for spending additional money on this project. She also does not want to support a plan that calls for Violet to supervise more people when she is already overwhelmed with the tasks she has. From Catherine's perspective, any further discussion of these issues will be non-productive. She selects the strategy that is most effective in cutting this discussion short – she insists she needs to "digest" the information on her own, consider other factors that she has in her notes, meet with Lisa and Carl, make her decision and get back to the team. In outlining this decision-making process, she is also modelling for Violet a way of dealing with issues that is autonomous and efficient. Violet's method calls for quite a different approach – talking things out. We can see these two methods at odds in the discussion. When Catherine says that she will take the document, digest it and make her decision, Violet objects.

V: Yea. Well, then the problem is then I'm not in on the final discussion.

C: Well, I imagine this is kind of your thoughts on where we need to go. I'll just respond to that.

V: But then how do we continue the dialogue? It's just, uh, it might

Her need to "be in on the final discussion" and to "continue the dialogue" make clear her assumption that further talk is needed in order to make a decision. Catherine's decision making process is quite different. She tells Violet, "I don't have the need to have all of us together...I think it should be pretty clear."

The result of this episode was that Catherine did not approve the plan for Violet to hire additional contractors. Instead, she brought in two other full-time employees, Jean and Jane, to work on the project. She took responsibility away from Violet and assigned it to them. Through her actions, Violet had not demonstrated the ability to manage a project of this magnitude or to make decisions that support the corporate agenda. Instead she had repeatedly demonstrated that, when given the responsibility for team leadership and project management, she feels overwhelmed, has limited experience and expertise, and needs a great deal of support from Catherine and other team members. Catherine chose not to give Violet the additional responsibility of supervising others. Instead, she brought in Jean to take over the team leadership position. As we saw earlier, Jean was a trusted employee who had demonstrated her ability to manage projects of this type.

Violet never fully understood why Catherine made this decision. Later, in an interview, she offered her interpretation of the events, seeing herself as a better manager of people than Catherine.

Violet: It was always like she wanted us to do things the way she would do it. If she could just figure it out her way and place it on us that would work out better for us rather than. I mean I feel like that's one of my big strengths as a supervisor manager. I mean when I had a team of writers and they said, "I need some help with that." What I'd get busy doing, is getting them some help. I'd take them at their word, y'know, I'd try to work with them on their terms cause they were doing the work. And that's what she, I mean I feel like that's her biggest failing as a manager and I mean it has been continuous.

Since Violet's values and work style don't consist of a strong affiliation with the bottom-line value system of the workplace, she doesn't generally think in terms of translating her needs and issues into a bottom-line which can be justified with a favorable return on investment. In addition, after three years as a course developer, the degree of teaching and nurturing that she requires is not viewed as cost effective or appropriate in this workplace. Time invested is expected to be re-paid with a high rate of return in productivity. Violet's contributions did not reflect sufficient pay-back.

In a conversation with her husband, David, Violet discusses how her work situation differed when she worked for a different manager, and when the training department's policies were different. In this dialogue, the cost of Violet's preferred way of performing her job is never addressed. Meeting Violet's personal agenda is the primary concern; its cost-effectiveness is not. Toward the end of this segment a new facet of Violet's personal agenda reveals itself: she likes to be in charge.

David: Can I put in a little something by virtue of talking to you [Violet]. I've heard more from you, not so much about Catherine's lack of giving you strokes, although that's certainly a big one, but more on this thing of her being too much hands on, and the specific way that you would have gone about this is to hire contractors that you just thought you just needed more resources to work on it and that Paulette [a previous manager] used to do that more, in other words,

Violet: Yea if I said, I need this many, she didn't scrutinize it, tear it apart and say, "Nope, ya only need two."

D: She would just kinda say, "Go about it. I'm interested in the end product. You take care of it." And you did well with that, and that has seemed to me, the bigger issue.

V: That is the biggest objection.

D: Because assuming that that is what you need to get this thing done, you would have been real involved with a team at this point

V: And that always

D: And you get your strokes from that. Cause it's group stuff and you're turning out stuff.

V: And they tend to like

D: And you're meeting the deadlines, after a fashion. And this felt like too little, and there's been a sense of lack all along like there's being too much required of you individually and that you haven't been free to hire the people you would need to get it done.

V: Right. And even right now with calling on different people, it's like she doesn't ack, I think I've said this to you before, she doesn't acknowledge that what I've done so far. So it's not like she says, "OK, these people are here to help you, so let's get 'em all in touch with you." It's like she is trying to direct them. As if she knows how to direct them. And then I really don't know if anything is getting done. So then I mean, y'know it's like confusion, plus, it's demoralizing. It's like she doesn't think, she doesn't respect what I've done, and she doesn't acknowledge that and so I'm sort of demeaned by, "You can't handle it, so I'll take it away from you." But meanwhile, I know it's gonna fall back on me, cause my name's still associated with it. I mean so I sort of have no authority and yet supposedly I've been given help, when I shouldn't've had that help and it's not y'know, it's not like I'm in charge.

A True Story that Serves as a Parable on Violet

In the fall of 1989, the training department began a lunch time choir. Anyone who was interested was invited to attend the weekly choral sessions which took place every Monday during lunch. The husband of one of the women in the department was a music instructor at a local college, and he had agreed to serve as director of the group.

Violet loved to sing. She had grown up singing in church choirs and had sung in choirs and singing groups throughout most of her life. For the training department's Christmas party, the choir decided to perform a number of Christmas carols and Chanukah songs. During the performance, Violet stood in front, first soprano, proudly singing and enjoying the opportunity to perform and shine. Georgianna Ames, the woman standing next to Violet, was less experienced, had missed some rehearsals, and forgot the words and harmonies to several songs. After the performance she told a colleague how, each time she faltered, Violet would lean over and sing in her ear, carrying her along until she was able to sing on her own.

This metaphor seems to capture a great deal about the essence of Violet's approach to life and work. She seemed to view life as a choral performance, with each individual contributing his or her best to create a single performance, a collaborative, team performance. In this performance, those with the strongest voices or the best memory for the lyrics often carry those

who need lean on them. You sing in someone's ear until they get it. Violet freely gave what she had to give, but when she needed to lean, and when she needed people to sing in her ear, she found that the cultural values and the cultural pressures did not provide for someone who needed to be carried for very long. What Violet struggles with, is coming to terms with the fact that this culture is not modelled on the metaphor of a choir. A more apt metaphor for this culture would be a concert of individual performers, performers often backed up by musicians, background vocalists, and others, but nevertheless, a concert very much based on solos by individuals who need to take responsibility for their own performances.

The Black & White Cases

The following two cases offer an interesting contrast to Jean and Violet. Sean and Don are both black & whites. Their personal agendas revolve much more around their interest in technology and their learning and interactional styles are quite different from those of Jean and Violet. They both report to William Jones, a manager whose style offers a striking contrast to Catherine's. Whereas Catherine has a long-standing reputation as a top performer—a strong, capable manager and a former stellar course developer, William Jones is new to Just. He had been with the company for just less than a year during the time of the study and had been hired as a manager, so he had no experience "in the trenches" at Just. Those who worked with him generally viewed him as a "nice guy" but an "ineffective" or "weak" manager.

Sean Miller

Sean has an intense interest in technology. Being involved with, learning about, and developing new technology provides his primary source of satisfaction. Sean is an intense individual who brings a tremendous amount of energy, intelligence, and commitment to the projects he cares about. He derives a great deal of satisfaction from both the process of work and the satisfaction of creating a finished product that represents the fruits of his labors. While Sean is not strongly motivated by an interest in business or the rewards of climbing the corporate ladder, he has ideas he cares deeply about and gets great satisfaction from seeing his ideas and visions become reality.

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with a minimum of hand-holding. We can see how dramatically this philosophy contrasts with Violet's.

Sean Finds Satisfaction Through: Learning about and Working with the Technology.

Sean enjoys working with the technology. He has a talent for working with computers and a great deal of persistence in sticking with challenging technical problems in order to figure them out successfully. In fact he derives a great deal of satisfaction from taking on and solving technical problems.

During the time I spent with Sean, he decided that, to open up a presentation he was going to give, he would create a computer animation. This required proficiency with a brand new and extremely sophisticated software package. Everyone I knew who had attempted to learn it had told me how difficult it was. Sean certainly didn't need to open his presentation with an animation, but he thought it would be fun to do. I spent several hours watching him "play" with the package, work through obstacles, get frustrated, make progress and learn. It took Sean many, many sessions, most of them at home on evenings and weekends, to learn to accomplish his task, but he did it and derived a lot of satisfaction from it.

Sean Finds Satisfaction Through: Leading a Team of Peers

Sean enjoys and perhaps needs to take a leadership position at work. His display of leadership takes various forms. He sets the agenda for his team, and in team meetings, he is clearly the leader initiating topics, imparting information, keeping others on track if their comments drift off onto tangents, and reminding them of the corporate agenda and values when necessary. In a team meeting Sean led, the following exchange illustrates how he promoted the corporate values.

Tim: Is this just the problems, or is this debrief going to include the successes too?

Sean: Well the bottom line at Just is always, what did we learn to move forward? So it's not just a pile of complaints, it's more

of suggestions and guidance to everybody out there who didn't live through the hell that we did.

Don: So how can we do it better next time is what we're trying to do.

Represents the team to management and outside vendors.

Because Sean's manager has not been a strong spokesperson for the group and has not had a clear sense of the group's issues, Sean took on that leadership position. He became the group's spokesperson.

Sean: All the problems, all the concerns, everything was filtered through me. I would represent the team...and that [having this weak manager] has driven me to want to manage within the training department at Just.

Sean explained that he had already interviewed for a management position which he did not get. He explained why he wanted the job.

I didn't necessarily want to take the job to be a manager. What I wanted is, I'd seen this group of people - I've interviewed and hired on everybody on my team. We've been exposed to a hodgepodge of ineffective management. I feel as though I have a lot to offer to that group. That's why I want to move into that. That's what is really motivating me, is seeing my team, and seeing what's happened to them and seeing obstacles before them. But I know if I had a title, it could knock down so much of that stuff. Outside of that little environment I don't know, I'm not motivated necessarily to go and be an administrative "people manager;" that's not what I'm after.

Sean's interest in the people issues, the "gray" issues is not what attracts him to management. He wants to be a manager because he believes he can help people to be more productive. He can enable the department to turn out more and better products if he plays the role of obstacle remover for his team. He talks strongly about the fact that most managers' allegiance is to upper management, but his would always be to his people. In keeping with his black & white values, he repeatedly makes the point that his goal as a manager is *not* to climb the corporate ladder, or get closer to the people at the top. It is rather to help those in the trenches, the people doing the "real" work.

Coaches others

Sean enjoys teaching others, if they are quick learners. Both he and others he has worked with acknowledge that he does not have a lot of patience for those who are not quick on the uptake. While Sean realizes that coaching others is an important aspect of his success as a manager, and he claims that it is one of his motivations for becoming a manager, those who have worked with him are cautious. The following comment, made by one employee who had worked with Sean, is typical of the kind of comment others made as well,

Sean is very intelligent and shoots from the hip. And if, in a few minutes, he doesn't score you as being intelligent, you'll get discounted very quickly.

Evaluates others in the workplace against his standards and values

Sean likes to evaluate the performance of other members of the department. He is quick to criticize and there are few he finds valuable and many he finds lacking. He has a particularly difficult time finding value in those who are not technical. He is fairly outspoken in his criticism, and this often makes others wary of him. Another employee describes Sean's attitude toward those he has worked with,

[When Sean worked with] Kim, in the beginning, his opinion of her was very low. She's not technical at all. That's not her forte. Her forte is people skills. She likes that, too. And that didn't work well in the beginning. But then he came to see her strengths, because she just really worked hard, did an excellent job, really shined. And now he respects her. Theresa was the same thing. She's not technical, but she worked hard. She's good, and she shone at something that he doesn't necessarily shine at. So his opinion changed. But if you ask him very quickly...his shot always is this - "fuzzy gray people, you know - what the hell are they talking about?"

In Sean's one-on-one he briefs his manager on many of the interactions he has had with others in the department and in almost every case evaluates the employees he has worked with. His evaluations are almost invariably negative. He discusses a meeting he has had with Kevin and Wanda, two employees in another department,

We keep going around and around with this course. And it's getting to the point where I'm getting pretty frustrated because

he doesn't understand and Wanda just doesn't get it. And I'm not sure what to do at this point because I have tried with them several times what it is that they need to do...but the whole concept of prerequisites and a curriculum, just can't get it through to them.

It seems that Sean's belief system about success includes the practice of calling things as he sees them, being outspoken and honest about faults he finds and individuals whose abilities he finds wanting. This is one of the aspects of his belief system that is somewhat at odds with that of the corporation. In general the cultural message calls for employees to seek "win-win" situations where adversarial positions are avoided and cooperation, compromise, and collaboration lead to better solutions than would be possible in a context where one individual's way prevails. Furthermore, even in situations where employees are falling short, negative judgements are kept quiet. Opinions may move efficiently through the office grapevine, but they move in hushed whispers. Sean is sometimes far more expressive and vocal about his opinions than is considered culturally appropriate. Furthermore, his critical nature tends to make some feel that he is arrogant while others feel intimidated and wary of what he may say about them.

Themes in One-on-One

As Sean describes above, much of his one-on-one is spent providing status reports to William on the various projects with which he is involved. Like Jean, he is quite accomplished at what he does and is able to take responsibility for his assignments and do what needs to be done. He does not seek coaching from William; he primarily keeps him informed. Also like Jean, Sean serves as team leader, so a portion of his time is spent reporting on the activities of the team. There are two lessons in Sean's one-on-one which are interesting to look at. One is a brief conversation about funding which serves as a telling contrast to Violet's stance with respect to budgets. The second involves the one time in the one-on-one that Sean genuinely reaches out for teaching from William and does not receive it.

Sean's Lesson One: "The Issue of Money Could Answer That"

In this segment Sean has just told William about a project the team wants to deliver. They have just finished developing a major new course and worked in conjunction with a group of several vendors. While the project was completed successfully, it had many problems along the way. Many of them were caused by working with vendors who were far away and never understood Just's goals or style of working. They "could never get ratcheted up to Just intensity," as one employee put it. The team, under Sean's leadership, has decided to put on a presentation for the entire training department in order to share what they learned in the process of working on this project. As Sean says in the team meeting, building the group's enthusiasm,

we'll put out a learning lunch,...send out an electronic mail saying, 'Here's all the bloody, gory detail about the networking course that you wanted to hear about. Come.' And all of us sit in front of the room and answer questions for an hour.

In discussing how they would present their experiences, one of the team members suggested hiring "an independent, objective person to interview us, someone who wasn't attached and involved in the project." The team liked this idea and decided that they should create a videotape of these interviews and then hold a brown-bag lunch for the department. They will begin by playing the video and then open the session up for discussion, questions and answer. One of the team members asks Sean, "Do you have any budget? To this, Sean says, "I can get money for something, if I think it's good enough." To his team, Sean presents himself as someone capable of working the system, able to get money for projects, if he thinks they're "good enough." This exchange illuminates one aspect of Sean's belief system about success. Black & whites, in general, hate to worry about budgets and going through the "political hassles" involved in getting funding. Sean knows he provides a valuable service by saying, in essence, don't worry, I can get the money. However, he also places himself in a position of power when he lets his team know that he will get the money, if he thinks the idea is good enough. Sean is the man to convince.

In presenting his idea to William, Sean takes an entirely different approach. He first explains that other teams have written up reports on their experience,

but he and his team felt that an interactive presentation would be much more effective. He describes the brown-bag lunch and video concept to William and asks him what he thinks. William is quite enthusiastic and basically echoes back the benefits that Sean has outlined,

I think it will probably have greater value for having people actually have interaction or discussion points about the experience. I think it's a better way to share that with people rather than the informal, passively, just passing the piece of paper or a document. That way you know that they got the information. They can probably even build off of some of the things that you guys are sharing with them. So, yea. I like that.

Sean then tells William that he bumped into Wallace Walker in the hall and told him about the idea and he thought it was a good idea too. Now that the ground work has been laid, Sean says, "One question I have for you, is dollars." Rather than asking the question, he frames his request in an odd way. He turns it into a statement rather than a question. This enables him to get information rather than risk a flat yes or no. Without waiting for a response from William, he goes on to "sell" his idea.

Sean: We can probably put a videotape together relatively inexpensively, if not free. I have to talk to Bruce Whitman about that, but this idea of bringing someone from the outside to do the interviews with us and kind of collect it all, the thought behind that, I'm kind of on the fence as far as how valid something like that is. One of the viewpoints that was raised was by bringing in someone from the outside would be far less biased than any of us would be and if any of us, or myself would be the one to conduct the interviews or write the script for this video or layout what the media would look like it could be very much biased. Which I agree it would be if we weren't careful, but I also think if we were careful not to do that, and not to be slanderous towards some of the venders that we used, it could be done properly. But the issue of money could answer that too. If there's not any, then the question is answered. If there is some then what would the dollar amount be? Is it possible to even find somebody to do that?

In this monologue, Sean separates the idea of creating the video from hiring the independent interviewers. By starting out with the premise that he can create the video even if little or no money is available, he has made it almost

certain that he will get approval to go ahead with the project since William has already agreed it's a good idea and Wallace has agreed as well. He also presents the idea of hiring the independent interviewer, but makes it clear that it was not his idea, and he's on the fence about it. He indicates that if getting funding is an issue, he thinks that he, or one of the other members of the team could overcome any bias and serve as interviewer. Sean knows that money is tight, funding for many projects is being cut, and he displays his sensitivity to corporate priorities by showing he is interested in turning out this project for as little money as possible. This is especially important because the project he is proposing is what is often referred to as "a nice to have, not a need to have." It benefits other members of the training department by supplying them with information that may make them more effective, but it is not a project that falls into the mainstream agenda of the department. Turning out projects like this is not what course developers are really hired to do. So, at a time when money is tight, this project would not be viewed as one that would get funded. Sean recognizes all of these issues and thus, makes the best case he can think of for his project by suggesting that the team could serve as interviewers.

In his quiet and low-key way, William Jones supplies a lesson in response.

I think that's gonna be tough perhaps to justify the dollars. Unless we had explored all the alternatives. Like within the training department or the company, is there somebody that could do that for us at no charge, who has pretty good interviewing skills?...And when you first mentioned interviewer, the first person that came into my mind was Dawn Windsor as a possible person who could, who I think has pretty good questioning techniques...

William goes on to mention two other individuals in the department who have good questioning techniques. It is a good idea and one Sean hadn't thought of. He quickly uptakes the lesson.

William: So, then, after we've explored those avenues [using people in the department], then if we have exhausted those options

Sean: I think any one of those will work. That's why I say, I was on the fence as far as the idea of bringing in an interviewer. It

was brought up and suggested, so I can easily be talked out of that.

Uptake of Lesson One

Sean readily accepts William's idea and emphasizes that he was never convinced that hiring someone was the right thing to do in the first place. He shows solidarity with his manager's priorities, but, perhaps because of Sean's valuing of a leadership position and owning responsibility for his projects, he doesn't acknowledge that William supplied him with a good idea. He makes the interesting comment that the idea of hiring an interviewer "was brought up and suggested, so I can easily be talked out of that." It is as if he is saying, it was somebody else's idea, so I don't really care about it. Indeed, such a stance was evident in other situations and is a characteristic that those who worked with Sean commented on. Sean did comment on several occasions that the grays are always relating to each other and working in teams but, in the black & white world, even when employees work on teams, they are really a "bunch of individuals." Sean likes working on his own, and his belief system about success and his own preferences lead him to work very hard to achieve goals in a way that enables him to shine, to be a superstar. Those around him think of him more as a marathon runner than a team player.

Lesson Two: My Number's Unlisted

At the end of the one-on-one, William tells Sean that he will be going on a special assignment to another state and so Sean will be able to serve as acting manager of the group. They had discussed the possibility of this assignment previously, so William knew that Sean would welcome the opportunity to act as manager. He also knew that Sean sought a management position and this would give him experience and visibility. Sean very much wants to succeed in this assignment, but he is worried too. He had an opportunity to act as manager once before and, apparently did not get positively evaluated by Andrew, the second level manager he was reporting to and Karen, the human resources manager who addresses the group's personnel issues. This negative evaluation was hard for Sean to take. He is used to working hard and being "stellar." He does not want to receive negative evaluations again on a job that means a lot to him. In the exchange that follows, he reaches out

to William for advice, information, and teaching. William is his primary resource for learning how to succeed. But William seems unable to give him what he seeks.

William: A couple of things I know we need to go over. I know the budgets and what kinds of reports and things like that are due from me...What reviews and things like that might be coming up that you'll have to participate in. Andrew also wants us to sit down I guess and have a meeting to detail what the

Sean: The three of us?

William: There are probably some questions that you have as well that I'll need to cover.

Sean: Yea. Just about any information you can give me on that and I also want to go over everybody in the group. Anything I need to be aware of or look out for or be sensitive to or make sure we have consistent support and consistent parenting between that time.

William: So if you make a list of things you think you need information on, I'll make sure we set down a priority of getting those things to you.

Sean: I think right now, without knowing what's on your plate, I'm not gonna have a lot of specifics. But it may require your doing a brain dump first and then I'll put together a list of more specific stuff and we can get back together again. Right now we have one-on-one time set up on the 18th, maybe we can use that to start.

William: I think the areas we'll probably be working on are people, projects, dollars. Most things fall under that. Also, you need to know that Andrew signed you up for a class called Managing at Just or something...also, next time they have this Managing Just Projects class, I'm going to suggest you take it...One of the things this [stint as acting manager] will do is positioning you for the next slot that comes up. I feel very strongly about that. It'll give you an opportunity to work with Andrew directly, again.

Sean: Mmhm. [laughs]

William: I think he'll develop an appreciation for your talents.

Sean: The comments that I got back from Andrew and from Karen in the last round, it's gonna be like all eyes upon me. So I'm gonna make sure I've got all the goodies in my bag, and make sure I pull everything out of your brain before you go, and get your telephone number while you're gone.

William: It's unlisted [laughs]. I mean if there's anything, just call...but I don't think there'll be any problems. I think you'll handle it very well.

Sean is eagerly requesting concrete "lessons" on what he needs to do and how he needs to do it to be successful as manager. William has mentioned reports that need to be done, given broad categories that he'll be dealing with (people, projects, dollars), and has suggested that Sean take two classes, but this information is not providing Sean with the lesson he needs to be successful. William tells Sean to "make a list of things you think you need information on," but Sean tries to tell him that he doesn't know what to ask; he needs a "brain dump." Doing a brain dump does not seem to be in William's repertoire of teaching skills. The two talk at cross purposes. Sean is seeking specific teaching and William alternates between telling him to come up with the specifics he needs to know and reassuring him that he'll do fine. Neither of these responses serves Sean's needs. What he wants is concrete information on what needs to be done, or as he says, he needs to be "sure I've got all the goodies in my bag." When it appears that he may not get any "goodies" from William, in a last ditch attempt to pull needed information from him, Sean says, he'll need to get William's telephone number while he's gone. William's joking reply, "It's unlisted" seems to underscore the fact that he is unavailable as a resource to Sean. Sean will have to sink or swim on his own.

William's main gift to Sean is his confidence in him. He makes two comments to this effect, "I think he'll [Andrew, who will be evaluating Sean's performance as a manager] develop an appreciation of your talents" and later, "I think you'll handle it very well. Sean may not appreciate the value of this confidence because he is so eager for specific direction on what to do as a manager. However, he is getting a lesson on moving up the ladder at

Just. As with other new assignments, specific instructions and coaching rarely come with the job. Individuals must figure it out for themselves.

Don Lauritzen

Like Sean, Don is very interested in technology and derives a great deal of satisfaction from learning how the technology works and what it can do and then teaching that to others through the courses he develops. Unlike Sean, Don is not highly motivated to be the driving force or team leader on the projects he works on. He feels comfortable being a team member and allowing Sean and others to take the lead if that is their preference. Because he feels comfortable receiving coaching, advice, and direction from others, he has a different kind of relationship than Sean has with William Jones. William plays a more active role in the one-on-one with Don. Don receives more coaching than does Sean and there is a richer exchange of ideas. The tone of the one-on-one is warmer and friendlier as well.

How Satisfaction is Derived: The Personal Agenda

Don Finds Satisfaction Through: The Process--Satisfaction Gained from Visualizing, Planning, and Executing a Project.

Don brings to the party many of the qualities most valued and important to developing effective training products. He has a great deal of technical ability, based on almost 15 years of working in the networking and communications area of various companies. He also finds a great deal of satisfaction in the process of developing training courses and in contributing products that others find valuable.

During the time I spent with Don I saw him in the early stages of planning a project, in the later stages of taking his plans around for feedback, in the process of incorporating feedback and making changes, as well as in team meetings and debriefings. He showed interest and commitment in each phase of the cycle. I always noticed how open and receptive he was to listen and learn from others. I once attended a class called Managing Just Projects with Don and approximately fifteen other members of the training

department. The course lasted for four days. On the second day we learned a way of developing and presenting a project "vision." Many people felt it was a creative and effective tool. The next day Don came to class with a beautifully rendered project "vision." After class on the day we learned about the concept, he had gone to work on his computer to apply the new tool to a project on which he was working. In that situation and in other situations where I saw Don's capabilities, he never flaunted them. Unlike Sean and others who want to be in the spotlight and enjoy the admiration of their peers, Don is low key. He doesn't seek out praise. In groups he contributes when he has something of value to add, but he doesn't need to talk a lot, and he doesn't need or want to be in charge.

When I asked him if he feels he's been able to satisfy his "customers," the people in the field, Don told me modestly, but with a genuine sense of satisfaction,

To sum it up, what I've heard from a couple of well-placed people is, "This is saving our ass" sort of thing, you know, from the field training standpoint, "This is now saving our reputation."

Don Finds Satisfaction Through: Learning about Technology

Don enjoys learning the technical content of his area and stays current by reading the professional journals that come out each month. He also enjoys contact with customers, especially in the area of troubleshooting. He likes to help them solve their technical problems by figuring out how the hardware and software might better be chosen, networked or configured. In fact troubleshooting is a word that comes up often in his vocabulary. We will see in his one-on-one how much he enjoyed and learned from a trip to the field that gave him an opportunity to work with customers.

Don's interest in technology leads him to define his job in way that requires him to know quite a lot about the technical aspects of the courses he is developing. As we saw earlier, some course developers, primarily the grays, define their jobs in ways that enable them to succeed through their expertise in designing training materials and project management. They hire technical

experts to write the courses, and don't believe they need to master the technical content. When I ask Don if he relies on others to be the gurus of technical knowledge, he responds by saying,

I have to disagree with the concept that you can develop a course without knowing content. I don't feel that way. For me it doesn't work. It just does not work. I have to know the content.

Don is a team player. He is comfortable being a team member and supporting a capable leader. He acts as an effective complement to Sean. Whereas Sean is highly motivated to be the team leader, his teams need capable competent members who will support him as leader and assume responsibility for portions of the projects. In a company where, as one employee put it, "No one has a small ego," individuals who have the maturity and temperament to serve as capable, contributing team members are a most valuable commodity. Don gets satisfaction from this role because it enables him to focus on "the meat," the technical content that he enjoys. He is content to let Sean and others deal with the politics, budgets and other issues that may put them in the spotlight. He doesn't seek the spotlight, and he doesn't feel threatened by those who do.

Don Finds Satisfaction Through: Teaching Others about Technology

[teaching others] I love the reward. I used to teach a lot, and to me, it's a great high. I really enjoy it quite a bit when I can get some fundamentals across that people take away with them and go, 'Oh, now I can build on that. I finally understand. Great.'

Although Don enjoys teaching others, he doesn't get asked as frequently as he would like. Perhaps because he is a black & white and is known for having a lot of technical expertise, some of the grays may be intimidated. Perhaps they are not interested enough to initiate learning events. Perhaps because Don is somewhat shy and doesn't have an elaborate social network, the wheels are not greased for interactions in which he could teach. Don says jokingly,

I either wonder if I piss people off, or there's just plain not enough time in the day, or I'm hard to approach, or I don't know.

It is unfortunate that more employees don't come to him to learn because he would like the rewards that teaching would bring, and others could benefit from what he has to teach and the integrity he would bring to the task. Unlike some other black & whites who fuel the general fear of looking stupid, Don does not think that way. When I mention that he might be surprised at the very fundamental level of questions he might get if people did come to him for teaching, he says he wouldn't be. He gives an example of one particular employee who did come to him with some very basic questions and said he was glad that "she feels like she can approach me." He also talked about his wife and how she never used to feel like she could "figure things out."

She finally [she] has realized that she can do it. And it's a major revelation for her. And she now gets a lot of enjoyment out of taking things apart and learning how they work. Because she now realizes...that she can figure it out, that it's not beyond her. But for decades she thought it was beyond her...until finally we, we got it sorted out, and she found out that she could do that...and very effectively too, and with much reward. Personal reward.

Don has obviously played a role in helping his wife to discover that she can figure out how things work, but he doesn't judge her as inadequate when "for decades she thought it was beyond her," and he doesn't take credit for her newfound capabilities or the rewards she gets. His expertise coupled with his respectful approach to teaching others is quite rare in the training department. He seems to be an underutilized resource in this regard.

Themes in Don's One-on-One

Don's relaxed, accepting attitude is apparent in all his interactions. It is evident in his one-on-one as well. Don's interest in technology and particularly his interest in playing the role of troubleshooter is a focus of much of his attention. Because William Jones does not have a definite agenda of his own to push and because he too seems to enjoy discussing the technology, a great deal of the time for the one-on-one is spent discussing technology. The first lesson is an example of an employee "teaching" or providing valuable information to a manager. Don is eager to share what he

has recently learned and William Jones is receptive to listening, asking questions, and learning. In the process he does ask good questions which cause Don to stretch and think about issues he might not have otherwise.

In the second lesson Don's interest in creating a technical reference manual leads him to request coaching on political and funding issues. Unless he knows how to get his project approved, he won't be able to create the manual. William provides the coaching he needs. Don is a black & white who is willing to work the system in order to get on with the technical work he enjoys. Other black & whites are often impatient and intolerant of the politics, bureaucracy, and budgets that must be dealt with before projects can be approved. They are often more resistant to work the system and more likely to go around it.

Lesson One: Two Techies Talk--Employee Teaches Manager

Don spends approximately the first half of his one-on-one with William telling him about a course he has gone up north to observe. In this portion of their meeting, Don is providing a lesson to William. The course on Just networks was developed and taught by a private consultant to some of Just's key customers. William and Don had thought that perhaps, if the course was good, Just would want to buy it from the consultant or hire the consultant to teach it to other customers. Don's assignment was to attend the course and evaluate it. It was clear that he thoroughly enjoyed the experience of hearing this expert teach the class and hearing about customers' interesting and challenging technical problems. It gave him a chance to do what he likes to do best: troubleshoot.

Since both Don and William have previously held jobs as technical troubleshooters, they both enjoy discussing this topic. Don does almost all the talking here, describing various customers and the networks they have and problems they are trying to solve. Don's value system with its emphasis on the value of technical knowledge comes through in his first evaluation of the course and the consultant, Conrad.

It was really impressive in the way of background knowledge that he has on Just Networks. He's an excellent subject matter

expert. His course wasn't a course; it was a little seminar, if you will. He's not a presenter; he's not an instructor. But he makes up for it so much in knowledge that the people in the class kind of accept that limitation. Cause he was able to find out what their particular problem was and give them enough ideas and things to try out and stuff like that that they go away fairly satisfied.

While other course developers with who place less value on technical expertise might have been more troubled by Conrad's lack of presentation skills and instructional design skills, Don finds that Conrad more than compensates for such significant deficiencies because of his technical expertise. Don continues to go into a great deal of detail on the specific technical problems that customers raised and the ways that Conrad suggested they solve the problems. He also shared, with some enthusiasm, the fact that he got to present a segment on a technical topic in which he has a special expertise.

Both William and Don clearly seem to enjoy this technical discussion. William asks Don many technical questions about the topics covered in the class and the customers who attended. He is clearly learning from Don although it's not clear whether William needs to have the level of technical detail that Don is providing him, or whether he wants this information because he finds it interesting, or perhaps he's not interested in getting this much technical information, but doesn't stop Don from sharing what he has learned. William is somewhat difficult to "read," and does not take charge of the agenda or keep as close a watch on his time as others such as Catherine do. William does keep tabs on the basic business agenda by frequently injecting questions to Don such as, "Was there anything we could use from that? Methodology or tools?" "It sounds like some of it could be case studies or something like that in your course on Networks."

Uptake of Lesson One

Don is responsive to William's questions which tie his observations and evaluations of Conrad's course back to its usefulness as a potential product for just. He has thought through these questions and has sound answers. For

example, after almost a half hour of describing what transpired in the course, William asks Don,

OK. From all this, what can we take from that to put in the course you're developing?...

Don: It was real reinforcement. What Conrad did was go through a lot of the basics...not just for basics' sake but...[so] you could take off from the basics...so for example, he spent about ten minutes on the electrical characteristics of cables, which was great - nice and theoretical. And then all of sudden he launched into quizzing people, "OK, where would you put a terminator in this case? Based on these electrical characteristics, where do you put a terminator?" And just providing scenarios, real practical scenarios...There's no information on that really, that we provide anyway. So it was those kinds of fundamentals, launching into practical problems...that I'd like to deal with in my course.

Lesson Two: William Provides Political Insights

In the second half of the one-on-one, Don discusses an idea he has for the new networking course he is about to start developing. Don has come to the conclusion that many people in the field, both sales people, support people, and customers need basic reference tools. As he says, "The body of information is available, but it's scattered, piecemeal...you have to dig for it." Don proposes the idea of creating one big reference book with all the information that people would need. This idea embodies a philosophy that he expressed to me repeatedly during the time we spent together; it is a philosophy that captures an important part of his belief system about success: people need fundamentals. If you give them the fundamentals, they can build upon them. He tells William,

What do we do for [technical] support [for our customers]? We continually come up dry. If people are armed with the basics, they can solve problems. We either teach it or generate a document and teach from that.

Don's idea is to create this major reference manual, which would be updated on an ongoing basis, and "wrap the course around that." Don then tells William that he needs help in getting support for this idea.

William then asks an important question, "What data do you have to support the course-book?"

Don: What data do I need?

William: Maybe the technical phone support team can say, "Yea, those are the issues we're getting and this book would support that." You could do a quick survey of Just's sales force and the computer dealers to find out if this would help them do their job...

Don: Do we have to gather data? Can we just see if people will support it cause their gut tells them it's the right thing to do?

William: Because this is costly, it will have to go up high. The people up high will want data, justification, evidence. This is not just a one time shot. It will have a long life. If we do it, we will need to maintain it. We need to justify it...

Don: I haven't had to this before -- here, championing something that is not just in the training department. I've seen it happen before, but I haven't had to do it.

William goes on to supply Don with more information about the political climate which will be valuable to Don in making a convincing case for his project.

William: If you can position it as a cross-functional project, and it's in line with putting more tools in the hands of users [that will help sell the idea]...[talk about] what would happen to Just if we didn't have this. Make the consequences look very unattractive...

Don: Thanks for the input.

William next suggests that together he and Don "run it by Andrew [the manager one level up] for his feedback." and concludes this lesson by saying, "I'll be more than happy to push this one."

Uptake of Lesson Two

Don has acquired valuable information and insights in this lesson. He has also won his manager's support for a project that might never have gotten off the ground otherwise. Don succeeded here, in part, because he had the willingness to admit what he didn't know, and to acknowledge that William had valuable insights to teach him. Many others in this culture might have been afraid to risk looking stupid and might not have said "I haven't had to do this before." Yet, it is this comment that prompts William to provide key "inside" information on the political climate and the kinds of justification that are likely to make Don's proposal succeed. Don also has the technical ability and know-how to make the project a success. It is well-worth investing in coaching him on the political side of the process because such an investment will pay-off.

Don's appreciation for this teaching prompts William to go a step further and suggest that they run the plan by Andrew, thus beginning the process of selling the idea up the management ranks and discovering additional issues that may need to be addressed in order to get funding and approval for the project.

Comparisons and Contrasts Among the Cases

Many striking contrasts emerge in looking at the four case study individuals. They are all course developers and they all have one-on-ones with their managers. Yet each individual shapes his or her job in a unique way. Each one-one-one takes a very different shape, based on the agendas of both the manager and the employee as well as by the topics and issues they choose to address.

Jean is a highly motivated individual with the skills and knowledge to produce the kinds of results that advance the corporate agenda. She derives a great deal of satisfaction from such achievements. This description could equally well fit her manager. They have much in common in that respect. Furthermore their learning and interactional styles are very similar. They are task focussed, achievement-oriented, and interested in doing whatever is required to get the job done with excellence. Their satisfaction comes primarily from the sense of accomplishment they derive from their work,

much more than from their interactions and relationships with people or technology.

Thus Jean and Catherine's one-on-one reflects their entire relationship: they understand each other because they share very similar agendas and styles. The fact that they frequently finish one another's sentences in the one-on-one serves as a metaphor for their entire relationship and for the way that Jean learns from Catherine. She takes up the lessons almost effortlessly because she understands and agrees with the assumptions and priorities that underlie them. She also has the skill and interest required to perform the tasks the lessons address.

Violet offers a striking contrast to Jean. Violet has a very different agenda than Catherine, and it maps less well onto the corporate agenda. Violet derives most of her satisfaction from interactions with people and wants to spend a great deal of her time working with people. She also enjoys doing certain tasks alone, but these tasks involve reading, revising, and editing, the work of others. Her approach to getting the job done, hiring people with expertise and managing the team, was not cost-effective and could not meet the time frame given for the project.

Because Violet and Catherine operate from such different sets of values and agendas, their attempts to find a way for Violet to be successful were ineffective. As the project continued to flounder, Catherine's style became more directive and assertive. She became less and less willing to allow Violet to find a way to manage the project in accordance with her values, skills, and abilities. The relationship became painful and frustrating for them both. Violet's confidence eroded, and it became increasingly difficult for her to believe that she was capable of successfully completing the project. They both wanted the project to be a success, but they never seemed to be able to bridge the great differences in values and approaches to work.

It's important to note that Catherine's values and agenda closely match the corporate agenda. The issues she and Violet cannot bridge are ones where Catherine assesses that the costs to the company and the time spent are too great to be justified. If Violet were allowed to follow her own agenda, the

bottom line would suffer. This is not an easy dilemma to resolve. Often the kindest approaches, those most supportive of the growth and self-esteem of individuals are not profitable.

The studies of Jean and Violet working, learning and interacting with their manager, show two women both striving to do their jobs well, and, in doing so, spending much of their time discussing people. The studies of Sean and Don show two men also striving to do their jobs well, and in doing so, spending much of their time discussing technology. For Sean and Don people issues were always secondary to issues about technology. In observing both Sean and Don as they went through their work days, the times they became most excited and animated, the times they expressed their strongest sense of satisfaction were the times when they actually "played with" the technology. When they were working at their computers learning something new, they got "ratcheted up." In meetings, discussing budgets, discussing people, their voices, their expressions, and their body language were much more subdued.

Sean offers an interesting example of an individual who has been satisfied and successful as a course developer. He is now interested in advancing to a position as a manager. He uses much of his one-on-one time to discuss managerial issues. Although his style as an individual contributor was to take responsibility for his own projects, not for other people, in his attempt to grow into the role of manager, he invests more of his time and energy in leading and representing his group of peers. In representing the team he finds himself needing to ask his manager for money for what he views as a non-essential project. He is faced with a problem similar to Catherine's in that someone on his team believed this was a good use of money, but Sean understands that it probably is not. He needs to value and represent his team member's idea, but also to be ready to support the corporate agenda. He is quite astute at doing so. He mentions the idea by saying he's on the fence about it, and when William says that it would be hard to justify the money for such a project, he quickly abandons the idea in favor of alternatives that wouldn't be an expense to the company. As an individual contributor, Sean did not feel as much affiliation with the corporate agenda. Now, because he wants to become a manager, he realizes that his personal goal can only be

achieved if he becomes willing and able to demonstrate that he buys into and promotes the corporate agenda. He has learned this lesson well.

Don most enjoys working with technology and has developed a substantial degree of skill as a course developer of technical material. Because he is not interested in moving up the management ladder, he has the luxury of spending most of his time doing what he enjoys most: learning about technology and developing training that teaches other people about it. He has to spend a portion of his time figuring out how to sell his ideas to management so he can get the funding he needs for his projects, but this is the part of his job that he views as a necessary evil. If someone would come and do it for him, as Theresa had at one point, he would like that. Unlike Sean and Violet, Don is not particularly motivated by visibility or recognition. In this respect he is similar to Jean. They both derive most of their satisfaction from doing the work, much of it working alone. For them, the doing is the reward.

Each of the case study individuals is complex and multi-faceted. They each respond very differently to the workplace and their responsibilities in it. Each wants to succeed at fulfilling a personal as well as the corporate agenda and each demonstrates unique and creative ways of meshing these agendas.

Epilogue

At the end of my period of observation and data collection, a re-structuring and lay-off took place at Just. The entire culture was affected by this event and the changes that it brought. Each of the four focal individuals was effected in the following major ways.

Violet August

Violet was laid-off. She was later re-hired by another department at Just. In her new position, Violet edits computer manuals. At first she felt much more comfortable in the editing job and commented that her attention to detail and perfectionism were an asset there. Her new manager brings in contractors to help when the workload becomes excessive. After about six months in the new job, Violet felt that many of the same issues she faced in the Training Department had cropped up again: too much to do in too little time without sufficient support and cooperation among team members. She still cries when we talk about the lay-off.

Jean O'Donnell

After the restructuring, Jean took on sole responsibility for the course that Violet, Jane, and she had been working on together. The April deadline was shifted to June. Jean worked nights and weekends and rolled out the course. Although it met all the specifications that had been established, the field trainers complained that the course was not advanced enough. It was not taught very frequently. Jean was assigned to a different project and has received a great deal of positive response on the rollout of her latest course.

Sean Miller

In the restructuring, William Jones was moved to a management position of a less strategic group, a group who are not "management eaters" like Sean's group. Sean served as the acting manager of the group while a search went on for a new manager. Sean had applied for the job as well and wanted it badly. Management was unsure that he was the right person for the job. Many members of the team were not sure they wanted to work for him. After five months of "acting," Sean was promoted to manager. Within

several months of his promotion, many of the members of his group had found other jobs within Just. Sean has had little time to "muck around with" the technology, and he misses the satisfaction that he found in that activity.

Don Lauritzen

In the restructuring, Don was moved to another group, a group he did not want to be in. Because his wide skill set qualified him to do a number of jobs, he was moved to a troubled group and put on a troubled project in hopes that he could contribute substantially. This shift enabled another employee with less flexibility to stay and take on Don's former job. The course Don had planned to work on, and the concept of the reference work with a wrap around course was turned over to that other employee. Don was frustrated and unhappy about the situation. He wrote me a note saying, "Achievement is realized by personal aspirations, not personal sacrifice...The good of the whole is best achieved when the individuals within the whole perceive a personal benefit. I don't perceive it." Don looked for other jobs inside and outside Just. He then left Just so that he and his wife could sail around the world. He plans to work as a freelance technical writer after the trip.

The Training Department at Just

Shortly after the lay-off, the training department moved into new quarters, two sets of new quarters. The black & whites moved to a building they share with Just's engineers, so they can work more closely and establish more credibility with the engineers. The grays moved to a different building in a town 15 miles away. The grays share this building with the training group at Just that develops and delivers the "soft skills" training, such as interpersonal skills training, interviewing skills, management skills and so forth.

Opportunities for the black & whites and grays to interact with one another, learn from one another, and build bridges between the two worlds have greatly diminished. In their new locations, the black & whites have the opportunity to achieve greater technical proficiency while the grays have the opportunity to further develop their interpersonal skills. Both groups are in environments that provide learning opportunities and encourage them to

continue to develop their strong suits; neither group is in an environment that challenges and supports the growth of their weaker suits.

—CHAPTER 6—

CONCLUSION

This final chapter consists of four sections. First, it provides a summary of the key findings of this study. Second, it outlines a set of implications for the workplace. Third, it outlines a set of implications for schooling. Finally, it offers suggestions for further research.

Summary of Key Findings

Theoretical Findings

The study began by stating its major challenge: to address the figure-ground dilemma. It is the photographer's as well as the researcher's challenge, the challenge of telling a story as truthfully and insightfully as possible while deciding whether to focus on the figure or the ground. This challenge is prominent when studying learning in particular cultures because it is individuals who learn. And cultures are composed of individuals who are unique and complex. But cultures are also vibrant, changing environments with values, beliefs, institutions, systems, customs, physical properties, and purposes which shape the individuals within them. These characteristics of a culture play a fundamental role in individuals' learning.

The study addressed the figure-ground dilemma by looking at both the culture "writ large," and then at individuals within it. Painting a portrait of the culture, its values, beliefs, structure, status system, and folklore provided a backdrop against which the goals and behavior of particular individuals could be understood. The individuals selected for case study represented an array of different value systems, skills, interests, motivations and styles. This variety served to highlight the way that different individuals mesh their personal agendas with those of the corporation. It showed that some individuals achieve a better fit than others and examined the reasons why.

Key Findings about the Organizational Culture

The portrait of the culture involved several layers. Unlike a community or village, business organizations exist to produce products or services that make money. This overarching purpose becomes the driving force behind the values, beliefs, and behavior of the individuals within the culture. Membership in this culture is voluntary. And when members choose to join the company, they also choose to define their goals in terms that will contribute to the goals of the corporation.

Key Cultural Theme

Each employee, through his or her work, has responsibility for contributing to the success of the corporation. Therefore, one's value is measured in terms of how significantly one contributes. Furthermore, because changes in business conditions and advances in technology occur at such a rapid rate, being able to work quickly and adjust to change are also important characteristics for employees to demonstrate. The most valuable employees contribute to the culture by being: outstanding, fast, and productive. Furthermore, they do so without requiring very much help or support from others. To use the cultural term, they don't need "hand-holding." Because the company can be more profitable if it has fewer employees, those who do not require much time being taught and supported cost the company less money.

The culture has terms for those who are outstanding, fast, and productive. They are "stellar," "superstars," "awesome," "young bucks," "movers and shakers." Those who can't "operate on Just's time clock," or can't "get ratcheted up to Just intensity," and those who need too much hand-holding are considered less valuable. Individuals acquire labels and reputations based upon others' perceptions of their ability to be outstanding, fast, and productive. Status in the culture comes from one's unofficial ranking on this scale. A formal review process also assesses each employee's performance and contributions. The rewards the culture has to offer: raises, promotions, and advancement, go to those who demonstrate this culturally valued behavior.

Subcultures Within the Organization

The corporation is large and has many subcultures. This study looked at one particular subculture, the Just Training Department. The ethnography revealed that within the training department, there were two sub-groups which had different value systems. These two groups, which emerged in the training department, also exist throughout the company and, the literature reveals, throughout the high technology industry as well.

Black & Whites and Grays

This unofficial division creates two groups: those who are technical and those who are less-technical. These two groups have many names for one another. Technical people are called techies, nerds, propeller heads, and black & whites. Less technical people are called, expressives, creatives, sales-y, and grays. Because Just is a computer company, the design and development of its products calls for individuals with technical skills. Other functions such as marketing, finance, training, and advertising require employees with varying degrees of technical skills. The technical people have a highly valued commodity and, as a result, they have status. As one individual commented, "It seems like technical people always have the chips. Because when somebody needs something like information, it's usually that they need something quick, and technical people always get to be heroes."

Technical people "get to be heroes," not only because they can get information for others, but also because they have valued knowledge and the power to make the technology work. Many others do not have this power. Because others don't have the training, the talent, or the time, they are dependent upon the technical people. Technical people are fond of pointing out that it is technical people who create the products that enable the company to exist and make money. Non-technical people respond that without sales people to sell the computers, marketing people to develop strategies for delivering products to market, advertising people to create ads, and finance people to keep the balance sheets, the company could not operate at a profit. Nevertheless, their arguments do not seem to override the fact that technical skills have a certain status, a certain aura.

Learning Opportunities

What Is Learned and How It Is Learned

Against the backdrop of these cultural values, the types of learning opportunities available to employees and the ways that employees make use of them take on special significance. The study explores the various learning opportunities available to employees as well as the key components of the workplace curriculum. Black & whites and grays spend their time learning about different areas of the workplace curriculum and make use of different learning opportunities. In general, black & whites spend a great deal of their time learning about technology. They most enjoy and find satisfaction in figuring things out themselves. They also learn by observing others and using manuals, magazines, and other media. In general, they are quite self-sufficient and prefer to learn on their own. Grays spend much of their time learning about the needs of the audience, how to design effective training materials, and how to move projects through the system. They prefer to learn about these topics through other people. Interpersonal interactions are their preferred way of learning.

What Isn't Learned and Why

What is perhaps at least as important as the opportunities available for employees to learn is the finding that many employees feel that they do not have adequate time or opportunity to learn all that they need to know to do their jobs well. The desire to have more time and opportunity to learn was a major issue among employees and a major source of anxiety. Most employees very much want to achieve culturally valued status as someone who is outstanding, fast, and productive. They want to do a good job, but often they are frustrated in their attempts because they don't know how and they don't have time or the opportunity to learn.

The Challenge of Learning Technical Material

One of the most frequently cited areas in which employees feel they need to know more but don't is in the area of technical knowledge. All employees, both black & whites and grays, face this challenge. However, black & whites

cite lack of time and sometimes lack of access to information as the primary constraints. Grays cite inadequate learning opportunities as the primary constraint. Not only do grays say they need more time and more access to information, but they also need support to learn the technical content required for their jobs. The support they believe would be effective consists of some form of instruction that could take them from their current skill level and show them how to perform a task or teach them technical subject matter in a manner that they find understandable. This support would include instruction which uses language that is not filled with technical jargon and acronyms they don't understand, materials presented at a pace that is comfortable, opportunities to ask questions and clarify understanding, and opportunities to practice the new skill or demonstrate understanding of a new concept until it is assimilated and integrated into the individual's repertoire. Such learning could be achieved through a class, a mentor, or the chance to get individualized coaching from someone who understands the technology and can teach effectively.

Even when such learning does occur, as it intermittently does in the training department, the learning often doesn't "jell" and become usable because there is inadequate support for the new skill or knowledge right after it is acquired. Opportunities to practice and use the new skill or knowledge and to have help and support during this initial phase of applying it are essential. Over and over again, individuals talked about "magic workshops" in which skills were taught but there was no follow-up. The term "magic" indicates that individuals feel that only magic would enable them to truly use what was presented. Instead, because there is no magic, the learner either never uses the new skill or knowledge, or makes an unsuccessful attempt at using the new skill or knowledge. The unsuccessful attempt usually takes this form: (a) the individual tries to perform a task using the new skill or knowledge, (b) discovers he or she can't successfully complete the task because only upon trying to use in on the job does it become clear that either he or she didn't really understand something in the instruction or has forgotten something, (c) the individual looks for but can find no help or support, (d) the individual becomes frustrated and (e) finds another way to achieve the goal or changes the goal to avoid needing to know the concepts or have the skills that have recently been taught. On several occasions people remarked to me, that they

had once been taught something but it "never made it to long-term memory."

Fear of Looking Stupid as a Constraint to Learning

In the training department, the obvious opportunity for grays to learn about technology and receive this follow-up support from black & whites rarely occurs. Grays rarely provide coaching to black & whites in the areas of business or interpersonal skills. Examining the reasons for this situation led to a variety of insights about how the cultural values constrain learning.

One of the primary constraints to learning is the fear of looking stupid. Over and over again, grays talked about being afraid to admit they don't know something technical. To make matters worse, they don't know where they can go to learn what they need to know. The people who know and who can teach them, the black & whites, are those they are afraid will judge them as stupid if they admit to not knowing. Many employees talk about not having anyone who was "safe to learn from." Someone safe would be someone an employee can tell how much he or she needs to learn without fear of looking like "a jerk."

Many of the grays who are successful at learning the technical content of their jobs learn from "underground" sources. They learn from what I came to think of as "the consultant in the closet." When I asked some people how they have acquired certain technical knowledge, they admitted with embarrassment that they have husbands, boyfriends, or friends, from whom they get secret help. They often spend many hours outside of their already long work week to learn what they need to know, yet they are embarrassed to admit it because they believe it somehow makes them look bad. They believe it reveals some deficiency in them. Some take courses secretly, although Just would reimburse them if they submitted the expense. They don't want to admit they need such instruction.

Another technique for dealing with the situation is simply "faking it." Grays often nod and act as if they understand technical information when in fact they don't. As a result, many live with a fear that at some point they'll be

called upon to demonstrate their knowledge, and they will be found lacking. Some individuals feel more comfortable with the fact that they don't grasp all the technical information than others. Individuals' comfort level with not knowing has much to do with both individuals' styles and values as well as their general confidence in the array of abilities they bring to the workplace. Those who feel quite confident that they bring much "to the party," in areas other than the technical area, are less threatened by the fact they may have less technical knowledge than others. They feel secure that they are making worthwhile and valued contributions in other areas, so their worth to the company is secure. Those who believe they are not "stellar" in their areas may feel insecure on all fronts. This leaves them most in need of teaching, coaching, and support and most afraid of revealing their learning needs for fear of being judged stupid and inadequate.

Lest this fear of looking stupid seem like unnecessary paranoia, there were enough examples of folklore about the stupid questions people had asked or the stupid things people had done to conclude that these fears were warranted. This folklore was common knowledge in the department and the names of the "stupid" people were freely associated with these stories of stupidity.

The Rich Get Richer

A recurring theme in this study is that those who are already strong are in a position to get stronger while those who are less prepared, less technical, less stellar are furthest from being in a position to receive the instruction and support that they need. Both the fear of looking stupid and the corporate agenda of performing in a manner that is outstanding, fast and productive work against the less stellar individuals.

The first cultural norm which works against them is that they do not want to admit what they don't know. But even if they did, who would help them? Others are generally working at such a rapid pace trying to "juggle all the balls they've got in the air" that mentors and coaches are few and far between. When a fellow employee does take time to help, it is frequently a one-shot deal. Rarely are there instances of mentors or coaches who take time on an

on-going basis to support the growth and development of a colleague. Many employees describe the feeling in this culture as "sink or swim."

Those who know enough to bootstrap themselves and learn what they need to know on their own or with a small amount of assistance succeed. Those who have consultants in the closet can succeed. Those who have no consultants, and those who do not know enough to bootstrap or are insecure about making decisions, performing, and creating deliverables without a very solid and secure knowledge base do not fare well in this culture. Such individuals often flounder, seeking and waiting for help and support which never comes. Meanwhile, they are not highly productive and become viewed as less capable. They receive fewer of the rewards the culture has to offer and sometimes are given less interesting and important work. They often look for other jobs in the company and sometimes drift in search of a niche where they can be productive and valued.

Non-technical Knowledge and Skill Is Discounted by Some

The black & whites, generally, had less expertise than the grays in the areas of instructional design, writing, business, finance, and interpersonal communications. However, in the black & white world, these skills are not highly valued, so they are discounted. Black & whites frequently claim they "couldn't be bothered" with these tasks, delegate them, or perform them to the best of their ability without a great deal of anxiety about consequences. Black & whites believe, apparently correctly, that their value to the organization is insured, based upon their technical prowess.

It's quite interesting to note that, not only do black & whites subscribe to the belief system that technical skills are superior to the gray skills, but grays generally subscribe to that belief system as well. Perhaps it would be more accurate to say that since the company depends upon outstanding technical talent to succeed, those who have that talent make critical contributions to the party. If they are less skilled in the non-technical areas, the company accepts that and accommodates them because of the need for their contribution.

In general, grays are reluctant to reveal their "stupidity" by asking black & whites to teach them about technology, and black & whites don't seem to have the motivation to learn the business and people skills that grays might teach them. A key phrase here is, "in general." Several exceptions to the norm surfaced during the study, and I will discuss them in the section on implications for the workplace because they suggest ways that bridges can be made between these two groups which have so much to teach each other.

Case Studies: Individuals Within the Cultural Context

Personal Agendas Provide the Motivation for Learning and Working

Individuals have different sources of satisfaction. The study revealed five major areas through which individuals derive personal satisfaction: (1) through work; (2) through learning and growth; (3) through relationships; (4) through feeling part of a larger community and (5) through rewards and recognition. The areas they find interesting and fulfilling are those they emphasize in their jobs. They define their jobs in ways that enable them to derive as much satisfaction as possible. Individuals are also highly motivated to learn and develop in the areas from which they derive satisfaction. They are highly creative and persistent in managing to create learning opportunities and shape the job to conform to these sources of satisfaction.

All employees have work objectives: projects they are responsible for completing. They need to find ways to achieve these work objectives, their contribution to the corporate agenda, while also achieving their personal agenda, finding personal satisfaction within their work. The case studies show that some personal agendas and corporate agendas mesh far better than others. In general, those who derive a great deal of personal satisfaction from the work they do make the best fit with the culture. They are motivated to perform outstandingly, not only because that is the job they are paid to do, but because it is personally satisfying to perform that job. These individuals find the work inherently rewarding. They do it because they want to, not because they have to. If they spend a lot of overtime on the job, they view it as their choice, not something they are required to do for the company. Those who

have such good fits tend to be those who are also most valued, rewarded, and advanced.

Those whose agendas mesh less well often have to choose between investing their time and energy on aspects of the job that they find rewarding and aspects of the job that have value to the corporation. For example, those who find learning and growth personally satisfying need to understand how much of their learning and growth will yield a pay-off to the corporation. That is as much as their job warrants. Additional time, money, and resources invested in their growth benefits them personally but becomes an expense to the company. Similarly, those who find satisfaction through interactions with others need to understand that such interactions are compatible with the job only to the extent that they contribute to advancing the corporate agenda. When such interactions provide a source of satisfaction to the individuals, but no benefit to the company, then they, too, become an expense.

On the other hand, an analysis of human behavior and organizational behavior is complex. Often the investment in learning or personal relationships has pay-offs that can't be measured in dollars and cents and that can't be measured in a brief time span. The investment an employee makes in learning a new product may lead to important contributions that can't be anticipated. These may come months later, but nevertheless will justify the investment in learning. Similarly, time invested in developing personal relationships, whether that be supporting and helping others or simply socializing, often results in payoffs to the organization that cannot be predicted.

Furthermore, for employees to feel satisfied with their jobs, they need to find personal satisfaction in the workplace. The time spent learning or socializing or being recognized for one's accomplishments may not contribute directly to the corporate bottom line. However, these may be the activities that enable employees to achieve job satisfaction and be productive and contribute to the corporation in the "bottom-line" oriented work. The issue ends up being one of degree. An employee's contribution needs to warrant the time invested in helping that employee to find satisfaction on the job. It becomes an issue of return on investment. The company needs to realize a return on its

investment in each employee. If the cost of keeping that employee satisfied is greater than the employee's contribution to the company, it is not an investment that can be justified.

This bottom-line fact of life is a key part of the corporate agenda. However, I never saw it spelled out clearly and directly for employees. It is interesting to note that some employees clearly understand this fact of life and act in accordance with it. Others seem to have little or no awareness that they need to justify their value to the corporation, that they need to earn their paycheck by producing more than they spend. There are individuals who do not think of their job as an obligation to contribute to the bottom line of the corporation. Those who are most aware of their contribution to the bottom-line tend to be the most outstanding, fast and productive. Those who are not aware often seem more concerned with achieving their own satisfaction and are often surprised when told that their preferred activities are not a priority.

The case studies show that individuals whose agenda is too far from that of the corporation can't be accommodated. Unless they are willing and able to bring their agenda more in line with the corporation's bottom-line, it is too costly in terms of time and resources to try to find a common ground. Talented and dedicated people may be lost this way.

Implications for the World of Work

Accommodating a Variety of Styles

Many businesses, including Just, are firmly committed to increasing the level of diversity in the workplace. There is quite a bit of talk at Just about how to "widen the nets" and attract and retain individuals from a wide variety of backgrounds. Yet, in spite of a genuine desire to achieve this goal, change has been slow.

The Profiles of Those Who Succeed

One of the reasons for this difficulty in achieving diversity seems apparent in looking at the values and themes in this culture. This study has shown that

those who do well are those who have strong skills coming in: can bootstrap themselves in areas where they need to learn; don't need hand-holding; intuitively grasp the corporate agenda, can think, learn, and produce at a rapid pace; feel comfortable not knowing everything they need to know; can deal well with risk and stress; are sensitive to the corporate agenda and its bottom line. The superstars and high-performers at Just very much fit this description.

Constraints to Nurturing and Including Those with Different Profiles

Those whose values and style mesh less well with the superstar profile have difficulty succeeding. Yet, if organizational cultures and those who identify strongly with them do not find ways to nurture and include those with different learning styles and value systems, they will perpetuate a system dominated by people with a particular, shared perspective and skill set. As corporate cultures seek to widen their nets and attract and retain talented individuals from a wide variety of backgrounds, they will need to find ways to sing in people's ears until they get the tune. They will also need to find that various harmonies and voices make the tune richer. Perhaps the profile needs to be less rigid so that there is room for a variety of players to contribute their talents. Perhaps there needs to be more appreciation for those, like Don, who have the willingness and talent to teach, for this is a culture that would benefit from more teachers.

This will not be easy. This study began by stating that culture is an adaptation that constantly evolves to best insure the survival of the culture. The profile of a valued member of the culture and cultural values at Just, and in the industry in general, have evolved to insure the survival of the corporate culture in the competitive, bottom-line oriented, capitalistic, rapidly-changing world of the high technology industry. Those who have not met the corporate agenda described here have not survived. This raises a very difficult question: Can the corporation of the future survive and succeed in this industry while widening its nets to nurture and develop a work force with a diverse set of personal goals, values and styles?

Mentors

Earlier in this chapter, I said that, while there were few examples of black & whites teaching and coaching grays, several notable exceptions occurred. It is worth looking at these exceptions because they suggest ways that the culture might be able to foster more such partnerships. For many, particularly grays, mentors provide an ideal way of learning. In order to foster mentoring, it's necessary to understand what would be both the obstacles and the rewards for a mentor. Among the obstacles, there are three major ones: people are too busy with their own work to take time to help others; many black & whites don't derive a great deal of satisfaction from teaching others; and there is no pay-off for helping others and there may be a disincentive in helping someone to be a high performer while there is competition between the two individuals.

How can this situation be turned around? One of the most powerful forces in this culture is the concept of the team. Most projects involve a team of several individuals who take on different portions of the total project. The team needs to work together to create a vision for the finished project and to decide who will do what, when, how much it will cost, how it will be implemented and so forth. This team approach means that the success of the project and success of each individual on the team depends upon the work of each member. Suddenly, everyone has a stake in their team members' ability to perform outstandingly. Examples of effective teaching between black & whites and grays take place when they are on teams together. In addition, once the project is over and the team disbands, former team members tend to call upon one another if they need help or coaching. Teaching and learning take place along the pathways of social interaction, and social interaction is propelled by team membership and shared responsibilities and goals.

Particularly on teams where members are perceived as having value to bring to the team, others on the team are generally quite willing to invest in teaching and coaching one another in areas in which some team members are less skilled. One team member may teach the others technical skills while another teaches writing or finance skills. What happens more frequently is that the teams simply divvy up tasks based upon strong suits so that those with finance skills keep the budget while those with the technical skills focus

on the technical areas of the project. This method is most efficient, and provides another example of a situation in which individuals become stronger in the areas in which they are already strong and are not encouraged, challenged and supported in growing in areas of less skill. Nevertheless, some cross-functional teaching may still occur as the less technical members need to understand enough about the technical aspects of the project to negotiate with team members and other business partners. Those who know the technical content may need coaching from someone with good writing skills in order to revise a training module or compose effective written communications. Numerous other instances of teaching and learning begin to occur as the team works together to achieve its goal.

If cultures seek to create teams of people who have common goals and varied skill sets, opportunities for peer teaching will occur. Teams can provide extremely valuable and effective learning opportunities. Many of those who learn best in this culture have mentors or coaches who are able to build the scaffolds that support their learning most effectively, particularly when in the act of mastering complex new skills. For many employees such personalized instruction makes the difference between success and failure. In almost all cases, a personal relationship was the basis for important learning. By moving the black & whites and grays further away from one another, as is happening in the training department, such opportunities become increasingly rare.

Furthermore, it is important not to gloss over the fact that teams are not always the most productive avenue for learning. As Violet's situation illustrates, when pressures of time and diverging value systems come into play, the slower team members or those with divergent points of view often are not accommodated. Teaching and learning tend to occur when there is a high and fast pay-off in terms of productivity. Quick studies with a strong grasp of the corporate value system are perceived as a worthwhile investment; others often are not viewed as such. Given this kind of cultural context, it will be particularly difficult for those from varied ethnic and cultural backgrounds to become integrated, contributing, and valued members.

Implications for Schools

Many of the forces at work in the culture provide powerful incentives and motivations for individuals to learn. As the opening quote of this paper states, "I really do think people learn differently here than in school...People never question that you're gonna learn something. They NEVER question it. It's just – you do it."

One of the forces that helps members to perform is the concept of team membership. Whether the team is the local high school football team, the Oakland A's, or the Sales Skills Training Team, once an individual becomes a team member, there is a strong desire not to let the team down. Team membership serves as a powerful motivator to achieve. It also provides incentives to team members to help one another, teach one another, and encourage one another because the success of the team depends upon the strongest possible performance of each member.

This sense of team, shared purpose, and shared responsibility for the success of each team member provides a model for school learning. Educational researchers have written much about the value and effectiveness of collaborative learning and peer teaching. This study serves to reinforce those findings. It also provides another rationale for further implementation of such models of teaching and learning. Collaboration and team work provide the contexts in which learning and performance occur in the workplace. Individuals' whose prior education has prepared them to work and learn in these contexts will have a significant advantage when they enter the world of work.

One of the keys to the success of this model is the concept that team is evaluated on its total performance. If each team member gets a separate grade, much of the incentive to help one another is gone. This does not mean that in the world of work as in the world of school that individual members are not evaluated in some respects on their individual contribution. However, the major evaluation and the major stake that each team member holds must be in the outcome of the project.

This commitment to the success of the project is most readily achieved when individuals work on projects with real outcomes, outcomes they care about. In other words, in the training department, if the project is creating a course that will be taught to thousands of people, the outcome will be the evaluations of those thousands of people. To achieve the same sense of real world purpose, classroom projects need to have real outcomes as well. Conducting experiments and taking action based upon results, planting neighborhood gardens, writing community histories, instituting recycling programs, and publishing anthologies of student work are some of the projects with real outcomes that have been successfully used in innovative classrooms. Well-designed curriculums across the grades which integrate subject areas are still very much needed. Learning is galvanized by a strong desire to succeed at a project one is highly invested in, particularly if that project involves the supportive and collaborative efforts of a team and has a real world benefit.

Another area in which this study suggests implications for schools is in encouraging educators to look at the ways that the fear of looking stupid constrains learning. Those who succeed in the workplace have confidence in their abilities and are not afraid to ask questions and seek out learning opportunities. Those rich in confidence got richer. They were empowered to fill in the gaps in their skill and knowledge without the fear that they would be labelled as stupid. Schools can play an important role in instilling students with that confidence. Schools should provide a safe environment in which students can learn without the fear of looking stupid. This is easier said than done because in classrooms, as in the workplace, peer criticism and judgement constrain individuals from admitting where they have gaps in skill and knowledge. However, schools are in a key position to enable students to discover, admit, and fill such gaps and then perform effectively. This achievement provides learners with a personal sense of both power and accomplishment which motivates lifelong learning.

Successful individuals in the workplace talked about two sources of confidence: some had been successful at school and thus, had concluded that they were smart and could succeed at work as well. Others had not done well at school, but had been successful at early work experiences. This second

group, a large group in fact, had, at some point in their school careers, discounted the value of being smart in school. They knew they were smart and figured out that they could be successful at work without being successful in the ways measured at school. Many individuals in the study talked about this and commented that frequently those who are the best students don't do well at work. Those who are wedded to the ways of achieving success at school, upon entering the world of work, are frequently: too rigid and not able enough to invent solutions to problems; too accustomed to looking for "right" answers and averse to taking risks; too dependent on an authority figure to tell them what to do and unwilling to take the initiative and go for it, too interested in their own achievements and recognition, not the team's. These discrepancies between the behaviors and values fostered in schools and those valued at work suggest ways that schools could shift focus to better prepare students for success at work.

The study has also shown that adults in the workplace tend to define their work in ways that allow them to play to their strong suits while finessing their weaker suits. Displaying one's talents and abilities is a rewarding and confidence-building activity. Students in school also benefit from opportunities to display their talents and special abilities. This is especially effective in a team context where a team project is advanced by each individual's contribution. This creates a situation in which team members receive positive feedback, appreciation, and recognition from their peers for their contributions.

While building on strength is important, it is also important for schools to help individuals find ways to strengthen their weak suits. Avoiding learning "the hard stuff," leads to the kind of one-sidedness that is a great handicap in the workplace. Employees who are most successful have confidence that they can master a wide variety of skills and knowledge. They generally have cognitive preferences and believe they have more of a propensity for some areas than others, but they can and do learn what they need to know in less preferred areas when they need to. They are also resourceful about drawing on a variety of resources to do so. Schools can prepare students for work by helping them to understand why it may be important to achieve greater comfort learning about less preferred areas. Once relevance has been

established, schools can enable students to find effective and rewarding ways to learn how to learn in the areas that are their weaker suits.

Implications for Further Research

This study opens up many avenues for further exploration. They include:

1. Looking at cultures and individuals over time. How does the culture evolve and what factors influence its evolution? How do particular employees develop over time? What factors influence their development?
2. Looking more closely at the acquisition of task knowledge. Since task knowledge tends to be acquired "underground" and with "consultants in the closet," further study is needed to examine these learning events. When and where do they happen? What is the nature of the interaction? What specific types of techniques are most effective? What is the pay-off for the consultant or teacher? How does the learner get on-going support in the initial phases of practicing and becoming proficient with new skill or knowledge?
3. Looking at other organizational cultures. How universal are the cultural values and practices revealed in this study? For example, across workplace settings, how widespread is the fear of looking stupid? In informally polling associates in many different companies and types of occupations, this phenomenon was almost universal. It would be valuable to look at a variety of workplace cultures to better understand both similarities and differences.
4. Looking at cultures that have more mentoring. What factors contribute to cultures that foster mentoring? What are the characteristics of successful mentoring relationships?
5. Looking at applying some of the cultural features that encourage effective learning to the classroom. In classrooms, what elements of the classroom culture contribute to teams that encourage learning and productivity? How do particular individuals learn and develop in these contexts? How would real world outcomes affect the motivations of learners in classrooms? How

do particular students learn in a variety of different workplace internship programs?

Final Thoughts

This study has focussed on one organizational culture, the Just Training Department. The study has provided a platform for listening to the voices of many of its members. It has looked closely at four different individuals within the culture to understand how particular individuals with unique sets of goals, styles, and motivations work and learn within the culture. Much of the dialogue and energy of the culture focuses on how to make it better by enabling employees to learn more, produce more, and achieve higher degrees of excellence. It is important to emphasize the fact that the achievements of this culture and the achievements of most of the individuals within it are quite remarkable. They rank among the highest in American industry. Yet, levels of productivity and achievement never seem quite high enough or quite good enough. The broader context within which the training department functions creates tremendous pressures. The conditions of the broader culture in which Just and its training department must compete include: the tremendous rate of advances in technology, the ever-changing business climate, formidable competition from other companies, and adjusting to the global nature of today's economy, including fierce competition from Asian nations.

People in the Just Training Department, like individuals in many organizational cultures, are often torn. It's clear they are judged by their ability to be outstanding, fast, and productive. They seem caught in an ongoing cycle of needing to learn more, faster, and with fewer resources. Yet, they have humanitarian values as well. They want to help one another, and they want their work to make a meaningful contribution. Sometimes the goals seem mutually exclusive. There simply isn't enough time in the day. Choices must be made. Economic realities shape the cultural values of business, and sometimes the humanitarian is sacrificed for the bottom line.

Studs Turkel (1972) wrote a book called Working in which he interviewed individuals across America in a wide variety of jobs. He wanted to know

about them, their work, and their lives. His description of what people look for in their work holds as well for the people I know at Just as it does for the people he got to know. I believe it is a universal search.

It is...a search...for daily meaning as well as daily bread, for recognition as well as cash, for astonishment rather than torpor; in short, for a sort of life rather than a Monday through Friday sort of dying. Perhaps immortality, too, is part of the quest. To be remembered was the wish, spoken and unspoken of the heroes and heroines of this book.

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APPENDIX A
FIELD NOTE INDEX

F N	Date, Day, Time	Setting	Key Event	Theme	Participant s	
1	7/21.F.9am	Hall/impr m	Hall Talk Field Talk fld person - former member of department returning to tell how it is in the field	Quota, learning; trng not a priority;	BB, MK, SR, VA peers & former mngt, now sales rep	
2	7/21.F.9am	local restaurant	lunch to discuss study; what would be valuable to learn.	what he gets out of work, being able to help people learn, make a difference	TJ, SR peers	
3	7/26.W.all day	local Country Club	Department Offsite	Improving our worklife; changing the things we can Roles and responsibts.; team bldg	all of CP's group: peers and their mngt	
4	7/27, Th.10:30 am	Outside A's cube	Hall Talk Group Talk	A's response to offsite; he's redoing timelines to build in learning; debriefing time	SR/AS peers	
5	7/28.F.9:30 am	the break room	Break rm talk (same as hall talk?) more chance meetings than initiated)	Learning motivated by need to know - insecurity about doing a good job, over- achieving; workohlsn; only contractors know stuff, others are "faking it"	KMc/SR peers	

6	7/28.F.10:30 am	the break room	Break rm talk	Don't know where to go to learn things you need to know; make it up as you go along; scatteredness prevents doing serious work	BD/SR peers	
7	7/28 9 am	Hall - nr CP's cube	A job assignment	evaluating resumes and work samples of job candidates	SR/CP emp/mngr	
8	7/31.M.9-11am	AJ's cube	Working and friendship talk	a former co-worker who's become a star at Just; mailing of Intro kits; her future plans at Just or elsewhere;		
9	7/31.M.9:30 am	Outside at picnic table	A job interview	evaluating a candidate for a contract DS position	SR/BA employee w/ job applicant	
10	7/31.M.1:45	CP's cube	Forecasting	reporting on money spent on projects	SR/CP emp/mngr	
11	7/31.M.2:15	VA's cube	Cube Meeting impromptu getting money	shifting \$ from one proj to another; fdbk on job cand.; team mtg.; Intro	SR/VA peers	
12	7/31.M.2:45	SR's cube	Cube Meeting impromptu on trng issues	curriculum plan; need for a ldr; team mtg	JO/SR	
13	8/1/T.12 noon	Local College	Development Lunch	CDs work-the Sales/Support Life Cycle	All of Dev. Grps - ind. conts and mngrs, WW too	

15	8/22	Coffee machine	Hall Talk	Leaving Just; pursuing one's dreams; values at Just conflict w/ her personal values-competitive, aggressive, fear all the time-fear of losing job; fear of making a mistake and getting wrists slapped; overachievers	PW/SR peers	
16	9/7.Th.10-12	AJ's cube	working	making contact w/ 3rd party to get deliverable; reading links; co-worker who is extremely thorough and capable;good model of all relevant Qs to ask;throwing away stacks of valuable reading mat'l-no time to read; never went through Prod trng-embarrassing;	AJ/SR	
16 A	9/14.Th.9:30	AJ's cube	working and discussing	AJ describes "the majob blunder" we discuss alternate plans for the 13 since no seminar tickets available	AJ, VA, SR	

17	9/14.Th.10:30-12:30	Conference rm	Team mtg.	Reviewing and finalizing agenda for the T3	VA, KH, AJ, SR peers	
18	9/17Sn.6:60-11pm	Conference rm	Coaching session/rehearsal - night before T3	Practice explaining the no ticket situation; welcoming; coaching on how to do a T3 and speak well- what to say and how to say it	CP, VA, SR manager and employees	
19	9/18.M.11:30-1:30	My car, driving from Just to the T3 session 1 hr. away	"off-line" talk	Learning for trainers, seminar ticket situation, fld percpts of Corporate; what CP did that made her so successful	SR/JF peers	
20	9/18 M.1pm	Hotel where T3 takes place	Train-the Trainer: gathering of all Trainers from around the country	Welcome, why no tickets; Introductions: background on each trainer; agenda for the week; curriculum plan; feedback on new course-Intro, eval.	VA; SR; KH; CP; all field trainers	
21	9/27W.noon	Auditorium	Annecment of new org.	New org.; new positions, some people will be changing jobs	all of Trng Dept attends; WW speaks	

22 a	9/27W.3pm	conference rm	Team mtg.	Determine and assign actions required to correct disk problem w/ a course; discuss new org; discuss meetings I'll be holding to get input on roles and responsibilities in new org;		
22	9/28.Th.10: 30 am	conference rm	Team mtg.	Debrief frm T3; set priorities for course development; Hands-on hi priority; budgets; need to hire more help; curriculum design	VA, KH, SR peers	
23	10/2.M.10- 11	conference rm	one on one	need for more resources; how to get hands-on created; getting notes of worldwide comp. mtg; evaluations- pretty good; Beta-how to make it good;	VA, CP manager and employee	
25	10/2M.noon	conference room	Staff mtg.	new org., how it affects CPs grp; biz plng in the rest of Just; production by AF; QA and Testing; forecasts, budgeting, new rules on accruals	all of CPs gpt led by CP, manager	

26	10/4.W.all day	Training rm in another bldg on campus	Beta-Day 1 a trial run of the course under development, attended by typical participants: computer dealers from across the country	Delivery of the course by two experienced trainers, feedback provided by the participants	6 resellers from all over the US as well as people from trng dept. and marketing.	
27	10/5Th.all day	Training rm in another bldg on campus	Beta-Day 2 a trial run of the course under development, attended by typical participants: computer dealers from across the country	same as above during the training time. After the class is complete, at 3 pm, about 2 hours are spent getting the participants' opinions; they stress the need for more hands-on; they want more depth; more technical info; less mktg stuff; show us how to do do things (hands-on-recurring theme); this class is for "rookies" that's OK if there's also a class for more experienced, but we need that class for the experienced sales person.	as above	

28	10/6.F.11-12	conference rm	Team mtg.	Dealing with negative feedback from the field; how to improve the course, how to get more hands-on; how to get equipment to field; how to do the T3; how to allocate resources, set timelines; follow up from T3	VA, KH, CP, manager and 2 employees	
29	10/9.M.4:30-6:30	conference rm	Team mtg	Generate a list of actions that were committed to at the T3, decide how and when to accomplish them, SR gives VA Beta feedback, discussion of negative feedback from field re T3, CP's reaction; brainstorming of how to improve courses and curriculum, testing	VA/SR peers	
30	10/13.F.1-3:30	Park, a picnic lunch	Picnic lunch	Interview on events over the past few months - what was learned. CP won't allow VA to solve the problem in her own way (thru hiring contractors to help); instead wants	VA, DA, SR	

31	10/17.T9-9:30	SR cube	cube mtg	"new shit"-the fact that the director, WW has been informed of the T3 and the course not being acceptable to the field; he wants CP to tell him what is being done to correct the situation. VA tells me that in the face of this she has finally learned something: not to get down, but to stay positive in the face of this type of crisis.	VA, SR peers	
32	10/24 T.3-5	conference rm	team mtg	Budgets, forecasts, production costs and timelines, postponing the T3 and course rollout from Dec to Feb, informing mkt of time and \$ changes-need reasons, development of new hands on-status and issues, curtic architecture	VA, KH, JH, LS, AF	
33						

34	10/27.F.9-10am	conference mm	mtg w/label vendor	new standards in packaging, meeting Just specifications , the printing process, typefaces, service-vendor providing exc. service to Just acct, formalized forms for quotes and work orders; signing the contract	AF, MH, PS, MH, DH, Label vendor, SR	
35	10/31.T.9am	conference mm	team mtg w/o vendor	Standard pkging: gauge of plastic and other specifications for binder; cost controls, how to get contract approval from Legal in time, have competing vendors show samples of their work, costs-specs, ganging orders, blanket agreements=tremendous savings; set up tour of printing house to see them in action	AF, MH, PS, DH, SR	

36	11/2.Th.9a m	conference rm	mtg w/box vendor	how boxes are assembled; cost of bldg box, sizes and weights of boxes; get prices in writing; compare w/other vendors; AF summarizes current problem; vendor provides solution-draw on our strengths-we know how to do this job; discuss cost vs quality; discussion of foam-cost vs quality, provide samples for comparison, spec job with all the different options so we can write contract and get job going	AF, MH, PS, DH, 2 Box vendors, SR	
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37	11/2,T.11a m	conference m	extended tm mtg on finances and inventory mngment	how to manage finances on pkging that will be used by field, tracking of inventory and ordering, how do we forecast, what if we make a mistake, write a job request (first time)-get a template, how AF and SV tell their managers about what they do; discussion of how these support people dont's feel support functions aren't valued.	AF, SV, BM, SR	
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38	11/3..W9-12	Chen Brothers Printer	Plant tour of printing facility and meeting with head of company and two exec. assts	To observe the plant in action and discuss /evaluate Chen Bros being selected as primary printer for all materials. Plant tour provides many opportunities to learn-all key procedures are observed and explained. Many Qs are asked and answered. Mtg. following tour provides more ops. for Just team to ask how various issues and problems are handled-how jobs are tracked, how quality is assured. It is noted that this co. handles major jobs for many of area's most prestigious cos.	T. Chen, R. Yee, A. Lee, AF, MH, PS, DH, SR	
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39	11/3W noon	Car trip home from Chens	Informal debrief and social talk	How great Chen Brothers is and will be to work with; modern equipment, local news, my study and trng dept. culture, how you learn things when you don't know how to do something, go to local experts in the group or outside, Phyllis on being considered an expert and the pressure that puts on her;	AF, PS, MH, DH, SR	
40	11/3W 1-2	Restaurant for lunch	Lunch to discuss learning and personal histories	How AF and PS came to be in production, interest in art /aesthetics and how things are designed, made and packaged, attention to detail, recognized as having that talent at an early age - AF did windows in her aunts bridal shop, also adult responsibilities at an early age	AF,PS, SR peers	

41	11/13.M9a m	RC's cube	Team mtg	on implmentatio n-what the Imp will do - Imp plan, part number, etc. RC clearly articulates what value she (as Imp) will add	AJ, RC, SR	
42	12/4.M 3-4pm	AJ's cube	cube meeting, impromptu	on advancement opportunities, AJ's job search for a position with more adv.ops. so far, search has led her to believe that a move to another dept. will be difficult. Qs about her technical skill level and the relevance of her current proj. mngmnt experience seem to be a barrier.	AJ, SR	
43	12/5,6,7 T,W,Th	local Hotel	Field Training Managers' Mtg.	Managers of field trainers from all over the country came in to discuss the issues which require cooperation and understanding between the training dept. and the field.	Trng Dept managers, FTMs, self- selected training dept. individual contributors	

44	12/12,13,14 T,W, Th	local College	Managing Just Projects class	Training on how to effectively manage a project team. How to develop a vision, sell it, and implement it. How to develop timelines and scope budgets.	self- selecting members of training dept., both managers and individual contributors	
45	12/15 F 1pm	Park	Picnic lunch, final interview	What she has learned since we last met - emphasis is not career as much as it is home and family. Team was concerned because she had set a standard at less than perfection. They didn't want to be associated with anything that had excellent quality.	SR/VA	
46	12/15 F 2:30-4 pm	SM's cube	Interview	The black and whites and the grays. B&Ws are interested in product (technical things); grays are creative. What B&Ws bring to the party is more important	SR/SM	

47	12/15	Conference rm	Team mtg	How to inform the department about the problems encountered in managing a vendor on a big project. Planning the party to celebrate the success. KW has "come a long way" "we can use her more than just as a recorder now." "We have to invite Theresa Melton to the party. " Value of TM. established in FN 48	SM, as team leader, DL, KW, TB, MH, PP	
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48	12/15 F 5-5:30	Conference rm	Post mtg talk	What value did TM bring? She believed in us, she was an insulator and fought our battles, she was very capable at fighting those battles, she could give a good technical presentation and answer tech. qs., she had business skills and managed all the finances which were very complex- did an excellent job at it.	SM/DL/SR	
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49	12/19 9-11 am.T	conference room	interview	Beth talks about how she has learned her AA skills: The DP, AJ School, which happens at "9 0'clock at night." She talks about now passing those skills along to a newer person and how people decide who they should take under their wing. She talks about "teaching" her boss about people skills and the appreciation she gets as a reslt. She also talks about not wanting to overcommit if she isn't sure she can deliver: she'd rather be safe than sorry- not a risk-taker in going for challenges that she isn't sure she can so.	Beth Whitney, SR	
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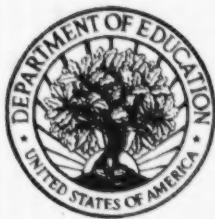
50	12/19 1:30-2:30p.T	conference mm	one on one	Discussion of ending a contract with a vendor: essentially firing the vendor. Jean is prepared with the milestones of the contract and a great deal of info to educate her manager on the current situation and on what she proposes to do. The manager will attend the "firing" meeting to back her up. In interview 12/22 she reports on how this firing session went and how CP helped her during it.	Jean O'Donnell, Catherine Pierce	
51	12/19 3:30-4:30p. m.	conference mm	one on one		Amy Johnson, Catherine Pierce	
52	12/20 2-4 p.m.	Theresa's office	interview	Discussion of how T. learned to be successful through past experience - being thrown into deep water-having to sink or swim as a manager and as a trainer with some hostile audiences. She also discusses her view of what she	Teresa Melton, SR	

53	12/22 3-11pm F.	sr's home	interview - with a lot of informal talk interspersed	Confirms and elaborates on various findings. Lots of discussions about working with Violet. Discusses how she learns technical info by reading, spending time with tech. people-making it a priority-taking the ops when they come and let other tasks fall in line behind. Motivations: learning new things, interesting projects, etc. Learns from others what NOT to do.	Jean O'Donnell, SR	
54	1/4 1:30-3	Conf. Rm	1:1	Debrief session, how to do it, budget available, goals, upcoming projects and budgets for them, response to Netwk. Admin, SM being positioned as next manager, preparation needed, upcoming task as acting manager while WILL in field.	SM, WILL	

55	1/4 3-4pm	conference rm	informal interview following 1:1	SM's opinions of managers, the status mobility system, his feelings about becoming a manager.	SM, SR	
56	1/11 2-3 pm	conference rm	formal interview	on how he learns: "troubleshtng , " prof. goals, reading, keeping up with the field, prior experience, willingness to help others, who asks for help, figuring things out, WW is light years ahead of everyone.	DL/SR	
57	1/16 9-10 am	JO's cube	figuring it out	working on designing and possibly writing a module, will determine scope and whther she will write or hire writer. Has gathered all relevant material, reads or re- reads it. Needs to develop a template. I have brought one whe likes. Will plug info into that.	JO, SR	

58	1/23 11:30-1:30	Conf.rm	Process Guidelines feedback session	Discussion of the development process in our department. Attempt to document the tasks that are performed and who is responsible. Considerable emotion around the workload and responsibilities of crs.develprs compared to other job funtions. Key concern of participants in the discussion: what is the goal of this effort to document the process? How will it help us, how will it add value to what we do?	Maureen Boyle, QA specialist, JO, JH, VA, HW, SR	
59	1/25 1-3	SM's cube	"figuring it out"	learning to use LiveAction	SM, SR	

60	1/30 9:30-11	conf. rm	1:1	DL reports on his trip to Seattle where he evaluated a training course, WJ asks numerous questions, discussion of customer and SE needs, discussion of netwk course dev., discussion of creating a reference book for SEs and to wrap course around that book.	DL, WJ, SR	
61	2/1 1-2 pm	conf. rm.	team meeting	biz trng team to discuss development of course	JO, VA, JH, AJ, SR	
62	2/7 12-2 pm	local restrnt	final interview	family history, current family situation, thoughts about work and career - history and futre	SR, AF	
63						



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